Genie®

Parts Manual

Part No. 88618
Rev B5
June 2006

Z™-80/60

(from serial number 100)

Technical Publications

Genie Industries has endeavored to deliver the highest degree of accuracy possible. However, continuous improvement of our products is a Genie policy. Therefore, product specifications are subject to change without notice.

Readers are encouraged to notify Genie of errors and send in suggestions for improvement. All communications will be carefully considered for future printings of this and all other manuals.

Contact Us:

http://www.genieindustries.com
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First Edition, Second Printing

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Printed in U.S.A.

How To Read Your Serial Number

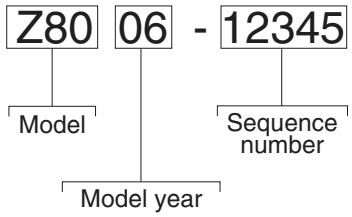
A TEREX COMPANY

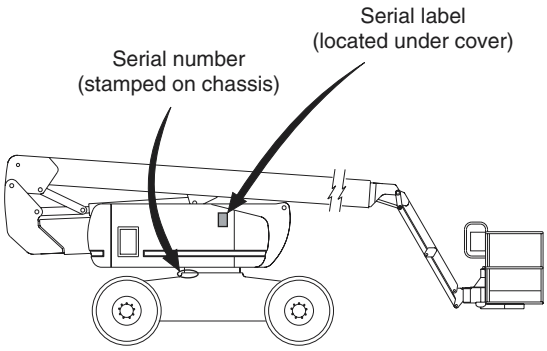
Model: Z-80/60
Serial number: Z8006-12345
Model year: 2006 **Manufacture date:** 01/05/06
Electrical schematic number: ES0188
Machine unladen weight:

Rated work load (including occupants): 500 lb / 227 kg
Maximum number of platfrm occupants: 2
Maximum allowable side force : 150 lb / 670 N
Maximum allowable inclination of the chassis:
0 deg
Maximum wind speed : 28 mph/ 12.5 m/s
Maximum platform height : 86 ft/ 26.38 m
Maximum platform reach : 60 ft/ 18.28 m
Gradeability: N/A
Country of manufacture: USA
This machine complies with:
ANSI A92.5
CAN B.354.4

Genie Industries
18340 NE 76th Street
Redmond, WA 98052
USA

PN - 77055





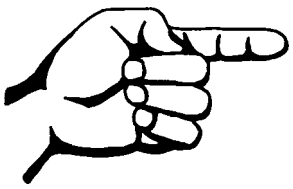


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Table of Contents

This manual is updated frequently. Each parts figure listed below has a figure number and a revision letter. If a figure is updated with new information, the revision letter or 'Rev' is updated (example: from Rev A to Rev B).

Figure	Rev	Description
101.1	B	Decals

If you have a printed manual, you can keep it up to date by downloading new figures from the Genie website at www.genieindustries.com.

How To Read Your Serial Number ..... *iii*

Parts Stocking List ..... *vii*

How To Order Parts ..... *viii*

Order Form ..... *ix*

Electronic Version

Click on the figure description below to view the figure.

100 • Decals

101.1	B	Decals with Words
102.1	C	Decals with Symbols

200 • Drive Chassis Components

201.1	C	2WD Steer Axle Linkage
202.1	C	4WD Steer Axle Linkage
203.1	C	Front Steer Axle
204.1	C	Rear Axle
205.1	B	Axle Installation
206.1	A	Drive Chassis and Axle Weights

300 • Turntable Components

301.1	B	Hydraulic and Fuel Tanks
302.1	C	Turntable Rotator and Hydraulic Rotary Coupler Installation
303.1	B	Ground Control Box - View 1
304.1	A	Ground Control Box - View 2
305.1	C	Turntable Covers

300 • Turntable Components - Continued

306.1	C	Turntable Components, Engine Side
307.1	A	Turntable Components - Relay Panel (before serial number 339)
307.2	A	Turntable Components - Relay Panel (after serial number 338)

400 • Engine Components

401.1	C	Perkins 704-30 Engine - View 1 (before serial number 329)
402.1	B	Perkins 704-30 Engine - View 2 (before serial number 329)
403.1	C	Perkins 704-30 Engine - View 3 (before serial number 329)
404.1	B	Perkins 704-30 Engine - View 4 (before serial number 329)
405.1	B	Perkins 804C-33 Engine - View 1 (after serial number 328)
406.1	B	Perkins 804C-33 Engine - View 2 (after serial number 328)
407.1	B	Perkins 804C-33 Engine - View 3 (after serial number 328)
408.1	B	Deutz F4L-913 Engine - View 1 (before serial number 339)
409.1	C	Deutz F4L-913 Engine - View 2 (before serial number 339)
410.1	B	Deutz F4L-913 Engine - View 3 (before serial number 339)
411.1	C	Deutz F4L-913 Engine - View 4 (before serial number 339)
412.1	B	Deutz BF4L-2011 Engine - View 1 (after serial number 338)
413.1	B	Deutz BF4L-2011 Engine - View 2 (after serial number 338)
414.1	C	GM 3.0L EFI Engine - View 1 (before serial number 363)
415.1	C	GM 3.0L EFI Engine - View 2 (before serial number 363)
416.1	B	Ford LRG-425 EFI Engine - View 1 (after serial number 362)
417.1	B	Ford LRG-425 EFI Engine - View 2 (after serial number 362)

Table of Contents continues on the next page.

Table of Contents

400 • Engine Components - Continued
418.1 B Ford LRG-425 EFI Engine - View 3 (after serial number 362)
419.1 B Ford LRG-425 EFI Engine - View 4 (after serial number 362)
420.1 C Engine Tray and Battery

500 • Boom Components
501.1 C Primary and Secondary Lift Cylinders and Linkage
502.1 C Primary Boom and Cable Track - View 1
503.1 D Primary Boom and Cable Track - View 2
504.1 C Secondary Boom
505.1 D Jib Boom and Platform Rotator
506.1 A Riser Hose Bulkhead Mount

600 • Platform Components
601.1 C Platform Installation
602.1 B Platform Controls - View 1
603.1 B Platform Controls - View 2
604.1 A Joystick Controllers

700 • Hydraulic Components
701.1 A 2WD Traction Manifold
702.1 B 2WD Oscillate Manifold
703.1 A 4WD Traction Manifold
704.1 D 4WD Oscillate Manifold
705.1 B Function Manifold - View 1
706.1 C Function Manifold - View 2
707.1 B Platform Manifold
708.1 B Platform Rotate Manifold
709.1 B Pumps
710.1 B Hydraulic Hoses and Fittings - Steer System
711.1 B Hydraulic Hoses and Fittings - Drive System, 2WD Models
712.1 B Hydraulic Hoses and Fittings - Drive System, 4WD Models (before serial number 539)

700 • Hydraulic Components - Continued
712.2 D Hydraulic Hoses and Fittings - Drive System, 4WD Models (after serial number 538)
713.1 B Hydraulic Hoses and Fittings - Turntable Components
714.1 B Hydraulic Hoses and Fittings - Boom Components
715.1 A Hydraulic Hose and Fitting Cross-reference

800 • Accessories
801.1 A Alarm and Beacon Package, Driving Lights
802.1 A Platform Options
803.1 A Ground and Platform Control Box Covers
804.1 B Hostile Environment Package - Primary and Secondary Boom Wipers
805.1 A Hostile Environment Package - Turntable
806.1 A Hostile Environment Package - Engine Air Cleaners
807.1 A Hostile Environment Package - Cylinder Bellows
808.1 A Panel Cradle Option
809.1 A Platform Overload - European Models
810.1 A Belt Driven Generator Option - View 1
811.1 B Belt Driven Generator Option - View 2
812.1 A Air Line to Platform
813.1 A Welder Option, Chassis Components - View 1
814.1 B Welder Option, Platform Components - View 2
815.1 A Welder Option, Hoses and Fittings - View 3
816.1 A Cold Start Package
817.1 A Half-Mesh and Pipe Cradle Options

Parts Stocking List

Required Parts

The following parts are required to perform maintenance procedures as outlined in the *Genie Z-80/60 Service Manual.*

Perkins 704-30 Models (before serial number 329):

Description	Part No.
Air Filter	62420
Fuel/water Separator Filter	62421
Engine Oil Filter	62422
V-belt	62423

Perkins 804C-33 Models (after serial number 328):

Description	Part No.
Air Filter	62420
Fuel/water Separator Element	101614
Engine Oil Filter	101613
V-belt	102534

Deutz F3L-913 Models (before serial number 339):

Description	Part No.
Air Filter	62420
Fuel/water Separator Filter	75484
Engine Oil Filter	62430
V-belt	62431

Deutz F3L-2011 Models (after serial number 338):

Description	Part No.
Air Filter	62420
Fuel/water Separator Filter	25960
Engine Oil Filter	49924
V-belt	102589

GM 3.0L EFI Models:

Description	Part No.
Air Filter	62420
Fuel Pre-Filter	65626
Fuel Pressure Regulator/Filter	65627
Engine Oil Filter	65623
V-belt	65621
PCV Valve	65620
Spark Plug	65622

Ford LRG-425 Models:

Description	Part No.
Fuel Pre-Filter	52179
Fuel Pressure Regulator/Filter	58967
Engine Oil Filter	28656
Air Filter	77295
Serpentine Belt	52580
PCV Valve	33957
Spark Plug (4 pack)	106490

Recommended Parts

Genie Gray Paint, 12 Ounce / 355ml Aerosol	1268
Genie Blue Paint, 12 Ounce / 355ml Aerosol	1484
Genie Blue Paint, 1 gallon / 3.78 liters	32150
Genie Gray Paint, 1 gallon / 3.78 liters	32151

Manuals

Genie Industries offers the following support documents for these models:

Title	Part No.
Genie Z-80/60 Operator's Manual (before serial number 207)	82258
Genie Z-80/60 Operator's Manual (from serial number 207 to 800)	82578
Genie Z-80/60 Operator's Manual (after serial number 800)	1000237
Genie Z-80/60 Service Manual	88619
EMI Safety Manual	27581
Manual of Responsibilities ANSI A92.5-1992	31779

How To Order Parts

Please be prepared with the following information when ordering replacement parts for your Genie product:

- ☑ Machine model number
- ☑ Machine serial number
- ☑ Genie part number
- ☑ Part description and quantity
- ☑ Purchase order number
- ☑ "Ship to" address
- ☑ Desired method of shipment
- ☑ Name and telephone number of the authorized Genie Distributor in your area

Use the Service Parts Fax Order Form on the next page and fax your order to our Parts Department.

If you don't know the name of your authorized distributor, or if your area is not currently serviced by an authorized distributor, please call Genie Industries.

Machine Information

Model

Serial Number

Date of Purchase

Authorized Genie Distributor

Phone Number

Genie North America
Telephone (425) 556-6551
Toll Free (877) 367-5606 in U.S.A. and Canada
Fax (425) 556-8659

Genie UK
Parts Telephone (44) (0) 1476 584352
Parts Fax (44) (0) 1476 584340

Genie Australia
Parts Telephone (617) 03375 1660
Parts Fax (617) 03375 1002

Genie France
Parts Telephone (33) (0) 237 26 09 99
Parts Fax (33) (0) 237 31 50 10

Genie Germany
Parts Telephone (49) (0) 4202 885223
Parts Fax (49) (0) 4202 885225

Genie Scandinavia
Parts Telephone (46) (31) 3409612
Parts Fax (46) (31) 3409613

Genie Iberica
Parts Telephone (34) (93) 5795042

Genie Brazil
Parts Telephone (55) (114) 1665755
Parts Fax (55) (114) 1665754

Genie Japan
Parts Telephone (81) (33) 4536082
Parts Fax (81) (33) 4536083

Genie China
Parts Telephone (86) (215) 3852570
Parts Fax (86) (215) 3852569

Genie
A TEREX COMPANY

Service Parts Fax Order Form

Fax to: (425) 556-8659 or Toll Free: 888-274-6192
International: +1-425-556-8659

Please fill out completely

Date _____ Account Number _____

Your Name _____ Your Fax Number _____

_____ Your Phone Number _____

Bill To _____ Ship To _____

_____ _____

_____ _____

_____ _____

Purchase Order Number _____ Ship Via _____

Model(s) _____ **Serial No.(s)** _____

Optional Equipment _____

Part Number	Description	Quantity	Price

All back-ordered parts will be shipped when available via the same ship method as the original order unless Noted below:

- ☐ Ship complete order only - No back orders
- ☐ Ship all available parts and contact customer on disposition of back-ordered parts
- ☐ Other (please specify)

FOR GENIE INDUSTRIES USE ONLY

Order Number _____ Origin Code _____ Comments _____

Date Scheduled _____ Ship Condition _____ _____

Order Total _____ Terms Code _____ _____

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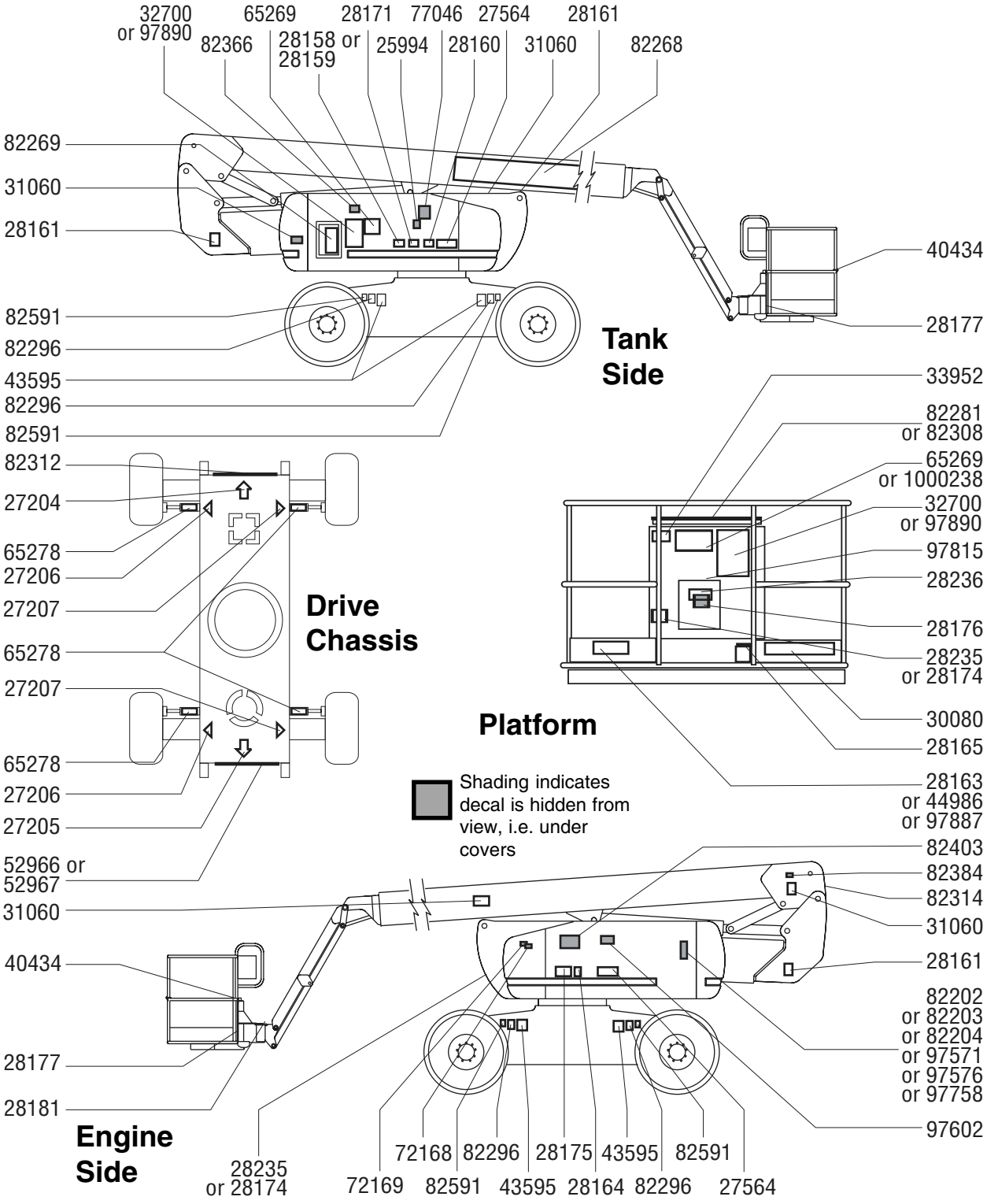
Parts Figures

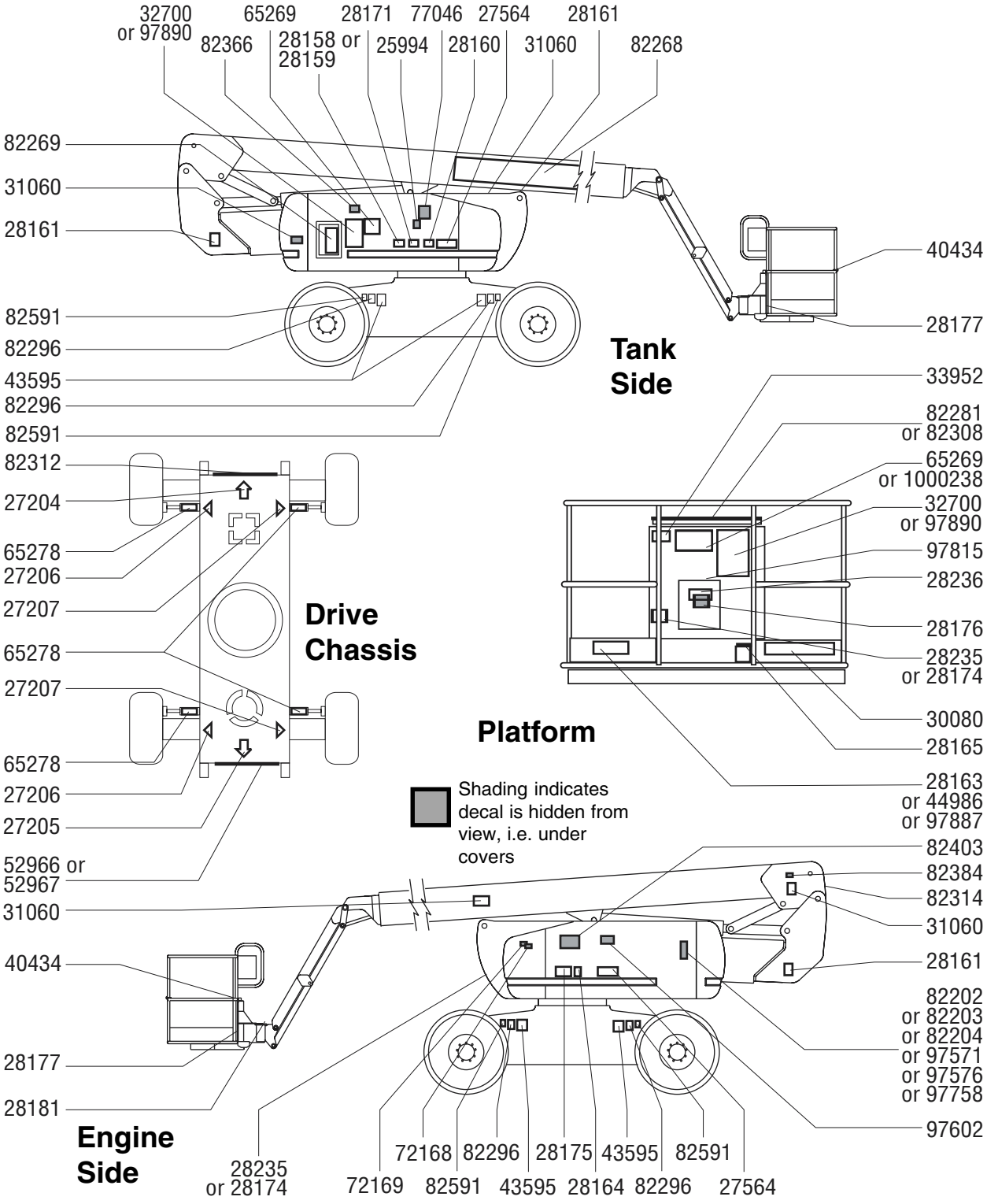
Figure	Rev	Description
101.1	B	Decals with Words



Item	Part No.	Description	Qty.
—	82309	Decal Kit - Safety Instructional (includes items 1-6, 9, 11-13, 15-18, 20-26, 30-33, and 43-46) (before serial number 801)	
—	111324	Decal Kit - Safety Instructional (includes items 1-6, 9,11-13, 15-18, 20-26, 30-33, and 43-46) (after serial number 800)	
1	25994	Caution - Shutoff Valves	1
2	27204	Arrow - Blue	1
3	27205	Arrow - Yellow	1
4	27206	Triangle - Blue	2
5	27207	Triangle - Yellow	2
6	27564	Danger - Electrocution Hazard	2
7	28158	Label - Unleaded	1
—	28159	Label - Diesel	
8	28160	Label - LPG (Gasoline/LPG models)	1
9	28161	Warning - Crushing Hazard	3
10	28163	Notice - Side Force, 150 lbs / 667 N (USA/Canada Models) (before serial number 801)	1
—	97887	Notice - Side Force, 150 lbs / 667 N (USA/Canada Models) (after serial number 800)	
11	28164	Notice - Hazardous Materials	1
12	28165	Notice - Foot Switch	1
13	28171	Label - No Smoking	1
14	28174	Label - Power to Platform, 230V AC	
15	28175	Caution - Compartment Access	1
16	28176	Notice - Missing Manuals	1
17	28177	Warning - Platform Rotate	2
18	28181	Warning - No Step or Ride	1
19	28235	Label - Power to Platform, 115V AC	2
20	28236	Warning - Failure to Read	1
21	30080	Notice - Maximum Load, 500 lbs / 227 kg	1
22	31060	Danger - Tip-over Hazard	4
23	32700	Danger - General Safety Rules (before serial number 801)	2
—	97890	Danger - General Safety Rules (after serial number 800)	
24	33952	Danger - Tip-over Hazard	1
25	40434	Label - Lanyard Attachment	3
26	43595	Danger - Tip-over, Tires	4
27	44986	Notice - Side Force, 90 lbs / 400 N, Wind Speed 28 m/sec, Australian Models	1
28	52966	Cosmetic, 4 x 2	1
29	52967	Cosmetic, 4 x 4	1
30	65269	Notice - Operating Instructions (before serial number 801)	2
—	1000238	Notice - Operating Instructions (after serial number 800)	
31	65278	Caution - No Step	4
32	72168	Label - Starter Battery	1
33	72169	Label - Controls Battery	1
34	77046	Label - Serial Plate	1
—	77183	Clear Protector	
35	82202	Notice - Engine Specifications, Perkins Engine (before serial number 329)	1
—	97758	Notice - Engine Specifications, Perkins Engine (after serial number 328)	
36	82203	Notice - Engine Specifications, GM Engine	1
37	82204	Notice - Engine Specifications, Deutz Engine (before serial number 329)	1
—	97576	Notice - Engine Specifications, Deutz Engine (after serial number 328)	
38	82268	Cosmetic, Genie Z-80/60	1

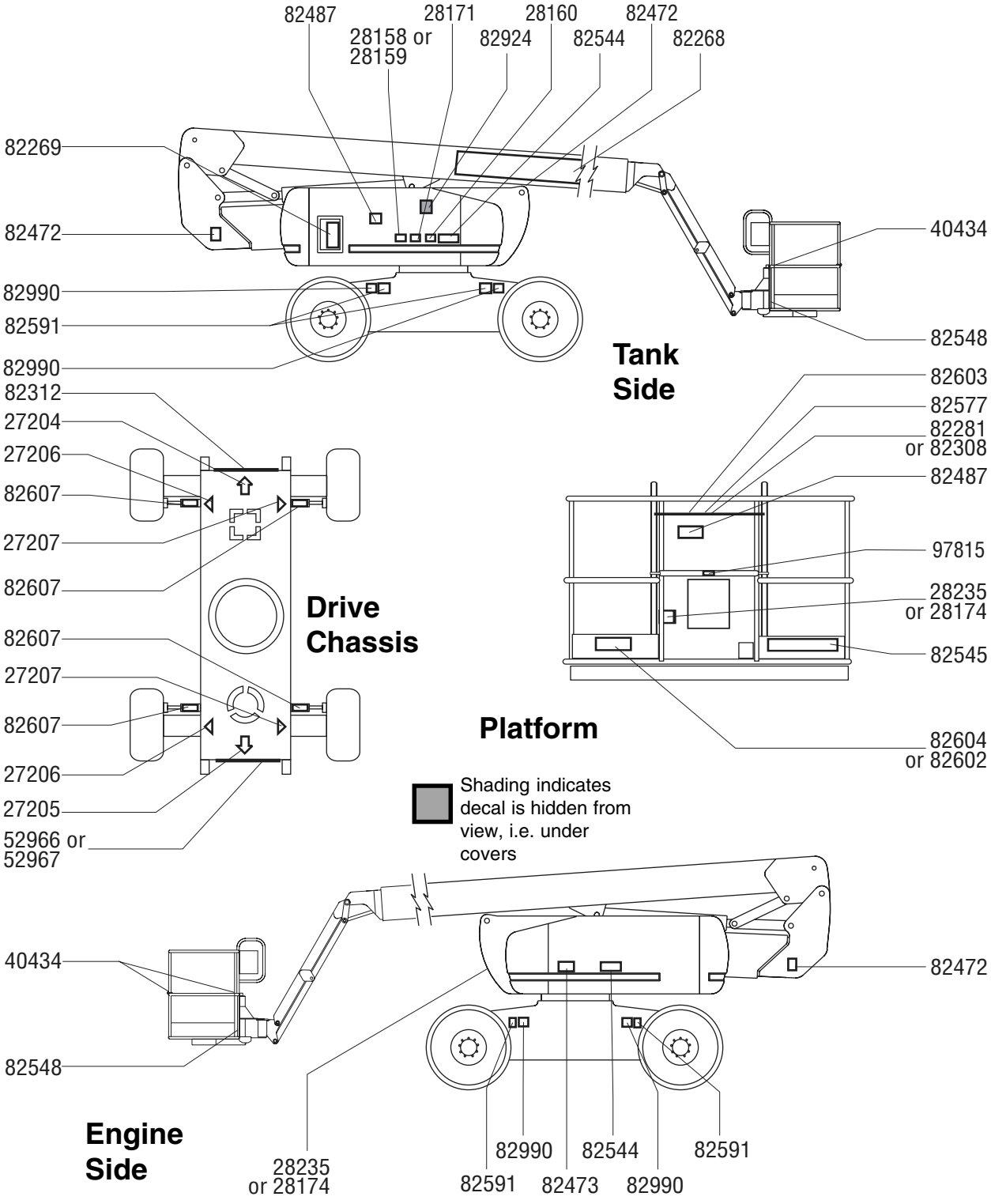
This list continues on the next page.

Figure	Rev	Description
101.1	B	Decals with Words



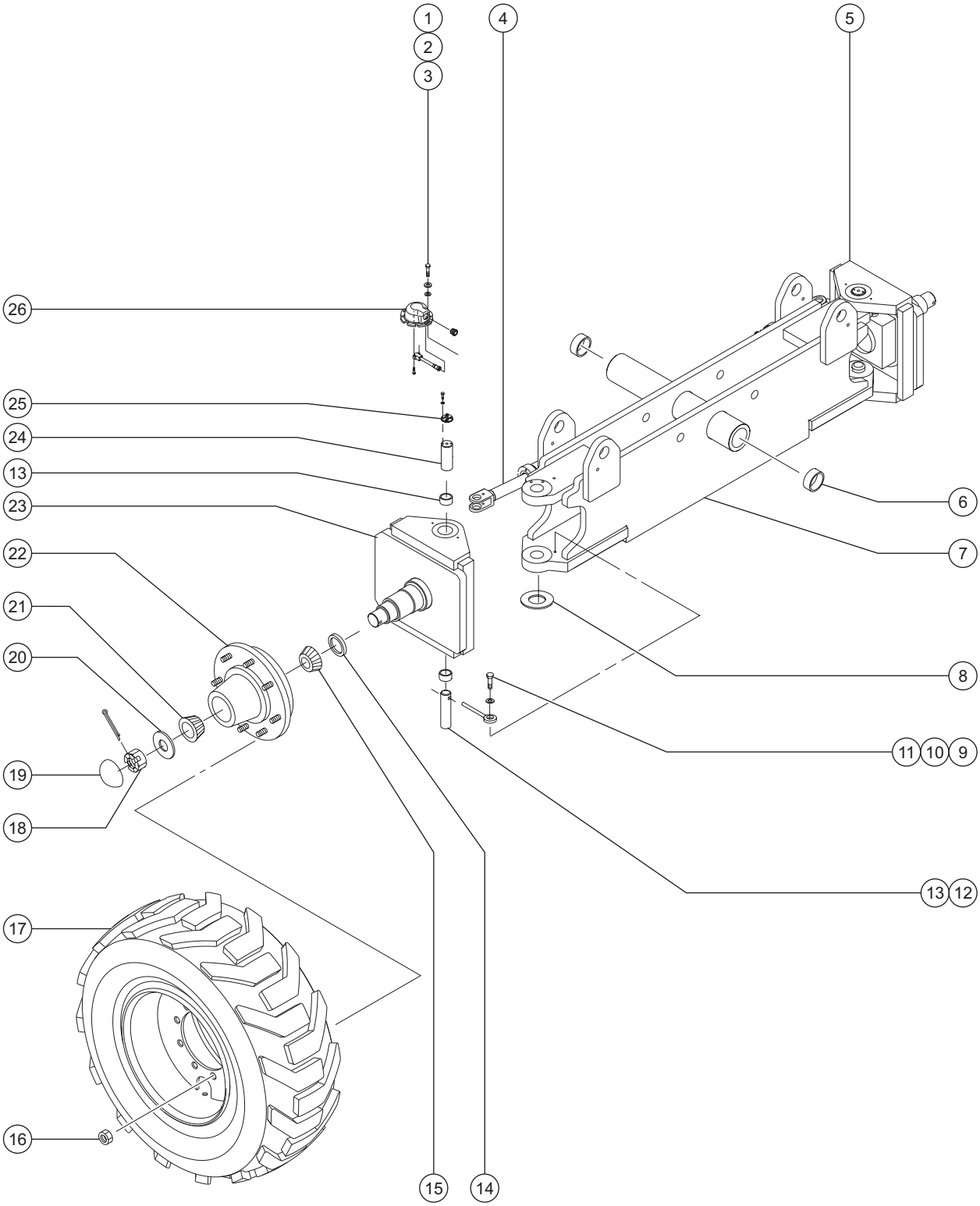
Item	Part No.	Description	Qty.
39	82269	Ground Control Panel	1
40	82281	Platform Control Panel	1
—	82308	Clear Protector	
41	82296	Notice - Tire Pressure	4
42	82312	Cosmetic, Z-80	1
43	82314	Danger - Tip-over	1
44	82366	Label - Chevron Rykon	1
45	82384	Label - Primary Boom Angle Sensor Voltage	1
46	82403	Label - Fuse and Relay Panel (before serial number 329)	1
—	97592	Label - Fuse and Relay Panel (after serial number 328)	
47	82591	Label - Wheel Load	4
48	97571	Notice - Engine Specifications, Ford Engine	1
49	97602	Warning - Explosion Hazard	1

Figure	Rev	Description
102.1	C	Decals with Symbols



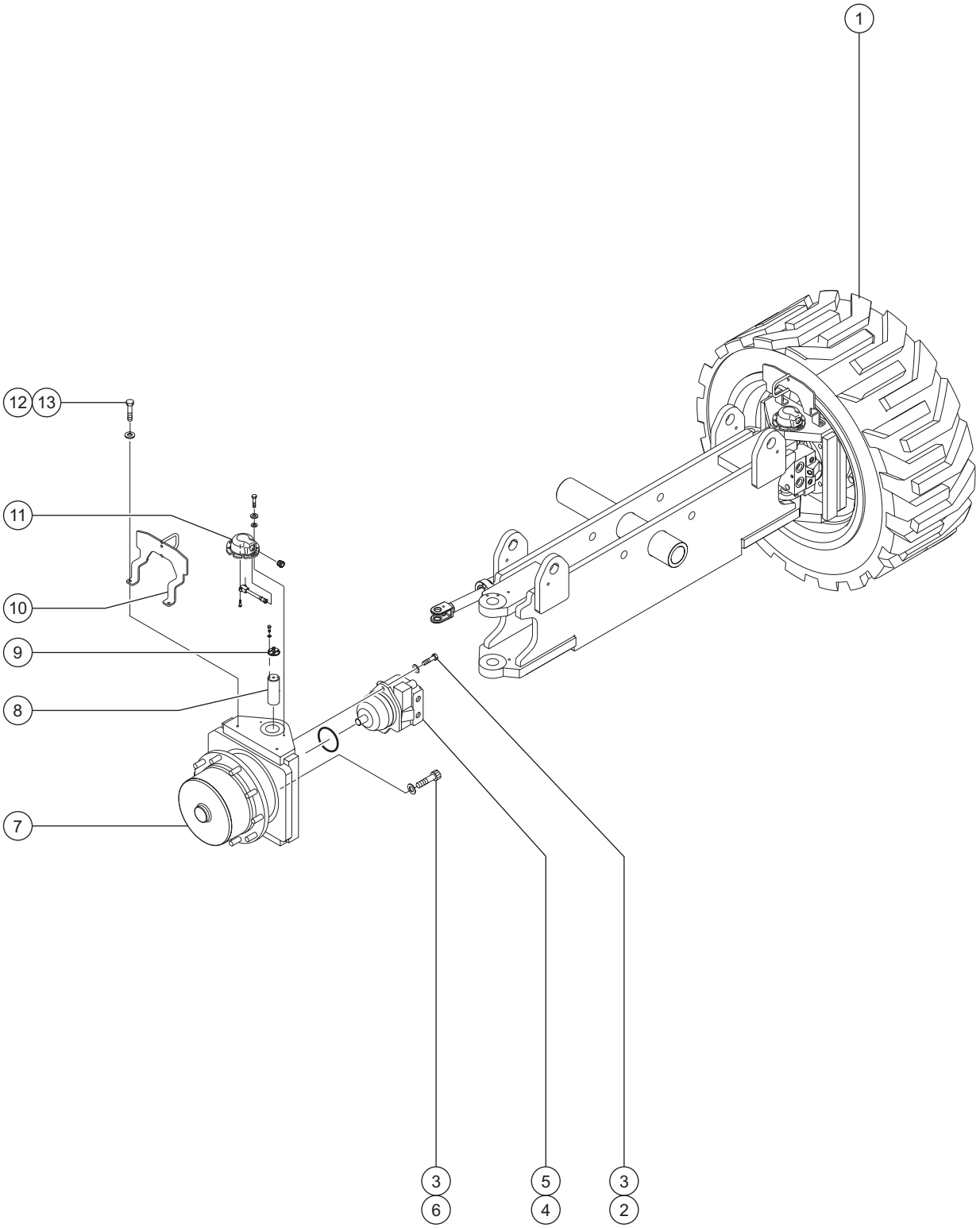
Item	Part No.	Description	Qty.
—	82676	Decal Kit with Symbols (includes items 1-4, 7, 10, 17-22, 26, 28, and 29)	
1	27204	Arrow - Blue	1
2	27205	Arrow - Yellow	1
3	27206	Triangle - Blue	2
4	27207	Triangle - Yellow	2
5	28158	Label - Unleaded	1
—	28159	Label - Diesel	
6	28160	Label - LPG (Gasoline/LPG Models)	1
7	28171	Label - No Smoking	1
8	28174	Label - Power to Platform, 230V AC	2
9	28235	Label - Power to Platform, 115V AC	2
10	40434	Label - Lanyard Attachment	3
11	52966	Cosmetic, 4 x 2	1
12	52967	Cosmetic, 4 x 4	1
13	82268	Cosmetic, Genie Z-80/60	1
14	82269	Ground Control Panel	1
15	82281	Platform Control Panel	1
—	82308	Clear Protector	
16	82312	Cosmetic, Z-80	1
17	82472	Warning - Crushing Hazard	3
18	82473	Caution - Compartment Access	1
19	82487	Notice - Read the Manual	2
20	82544	Danger - Electrocution Hazard	2
21	82545	Danger - Maximum Load, 500 lbs	1
22	82548	Warning - Platform Rotate	2
23	82577	Label - Platform Overload Patch	1
24	82591	Label - Wheel Load	4
25	82602	Danger - Maximum Side Force, 667 N / 150 lbs (Asia/South America)	1
26	82603	Label - Drive Enable Patch	1
27	82604	Danger - Maximum Manual Force, 400 N / 90 lbs (European Models)	1
28	82607	Caution - No Step	4
29	82924	Caution - Shutoff Valves	1
30	82990	Label - Tire Pressure, High Flotation	4
31	97815	Label - Lower Mid-rail	1

Figure	Rev	Description
201.1	C	2WD Steer Axle Linkage



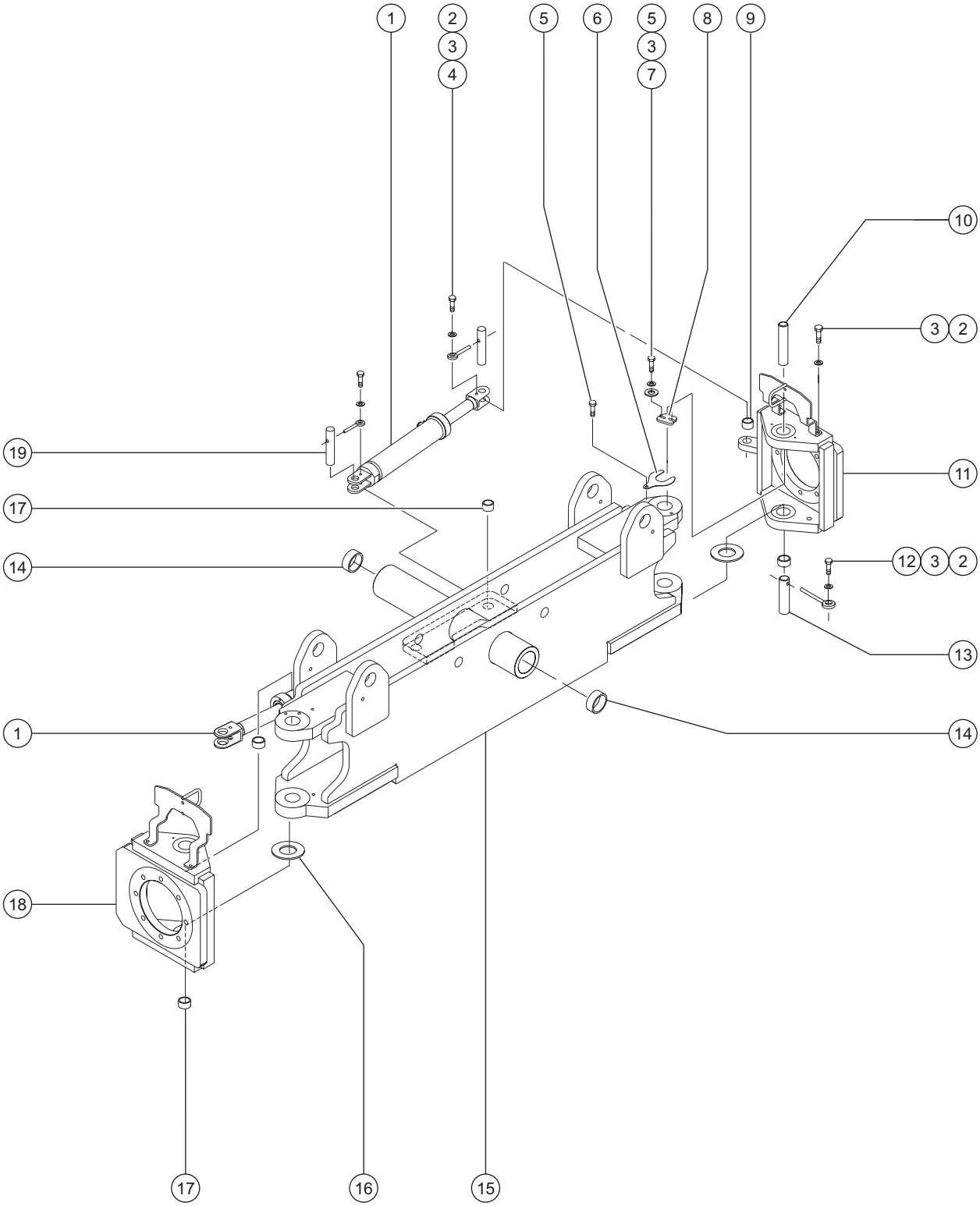
Item	Part No.	Description	Qty.
1	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
2	6356	Lock Washer, 1/4 inch	
3	6638	Flat Washer, 1/4 inch	
4	59370	Steer Cylinder	2
—	88349	Seal Kit	
5	88226	Steer Yoke Assembly, Tank Side with Bearings	1
—	25817	Bearing, 1 x 1.25 x 1 inch	
—	30221	Bearing, 1.75 x 2 x 1.5 inches	
6	27698	Bearing, 2.5 x 2.75 x 2	2
7	82908	Front Axle Assembly	1
8	60555	Thrust Washer, 1.81 x 5 x 0.25 inch	
9	8255	Screw - HHC, 3/8 -16 x 0.75 inch, GR 5	
10	6021	Lock Washer, 3/8 inch	
11	45226	Rod End, 0.375 x 3.69 inches	2
12	88067	Pivot Pin, 4.25 x 1.75 inches	2
13	30221	Bearing, 1.75 x 2 x 1.5 inches	4
14	94794	Grease Seal	2
15	94793	Bearing, Inner Cone	2
16	34127	Lug Nut, 3/4 -16	20
17	Ref.	Wheel (refer to 202.1)	
18	34627	Castle Nut, 2-12	
—	34628	Cotter Pin, 3/8 x 3.5 inches	
19	94795	Dust Cap	2
20	34626	Flat Washer, 2 inch	
21	94796	Bearing, Outer Cone	2
22	94789	Hub Assembly with Races	2
—	94790	Inner Race	
—	94791	Outer Race	
—	94792	Wheel Stud, 3/4 -16	
23	88225	Steer Yoke Assembly, Engine Side (bearings included)	1
—	25817	Bearing, 1 x 1.25 x 1 inch	
—	30221	Bearing, 1.75 x 2 x 1.5 inches	
24	88066	Pivot Pin, 4.25 x 1.75 inches	2
25	60618	Activator, Steer Sensor	2
—	60747	Steer Sensor Activator Shim	
26	107864	Steer Sub-Assembly Kit	1
—	107862	Steer Angle Sensor	
—	60609	Steer Sensor Cover	
—	49817	Screw - PHM, 10-32 x 1.25 inches	
—	60440	Connector - Receptacle, 3 way	
—	83130	Terminal - Pin (3 required)	
—	60441	Lock - Receptacle, 3 way	
—	75631-3700	Air Hose, 3/8 inch, 37 inches	
—	75632-300	Tubing - Heat Shrink, 3 inches	
—	60746	Squeeze Connector Bushing, 1 inch	

Figure	Rev	Description
202.1	C	4WD Steer Axle Linkage



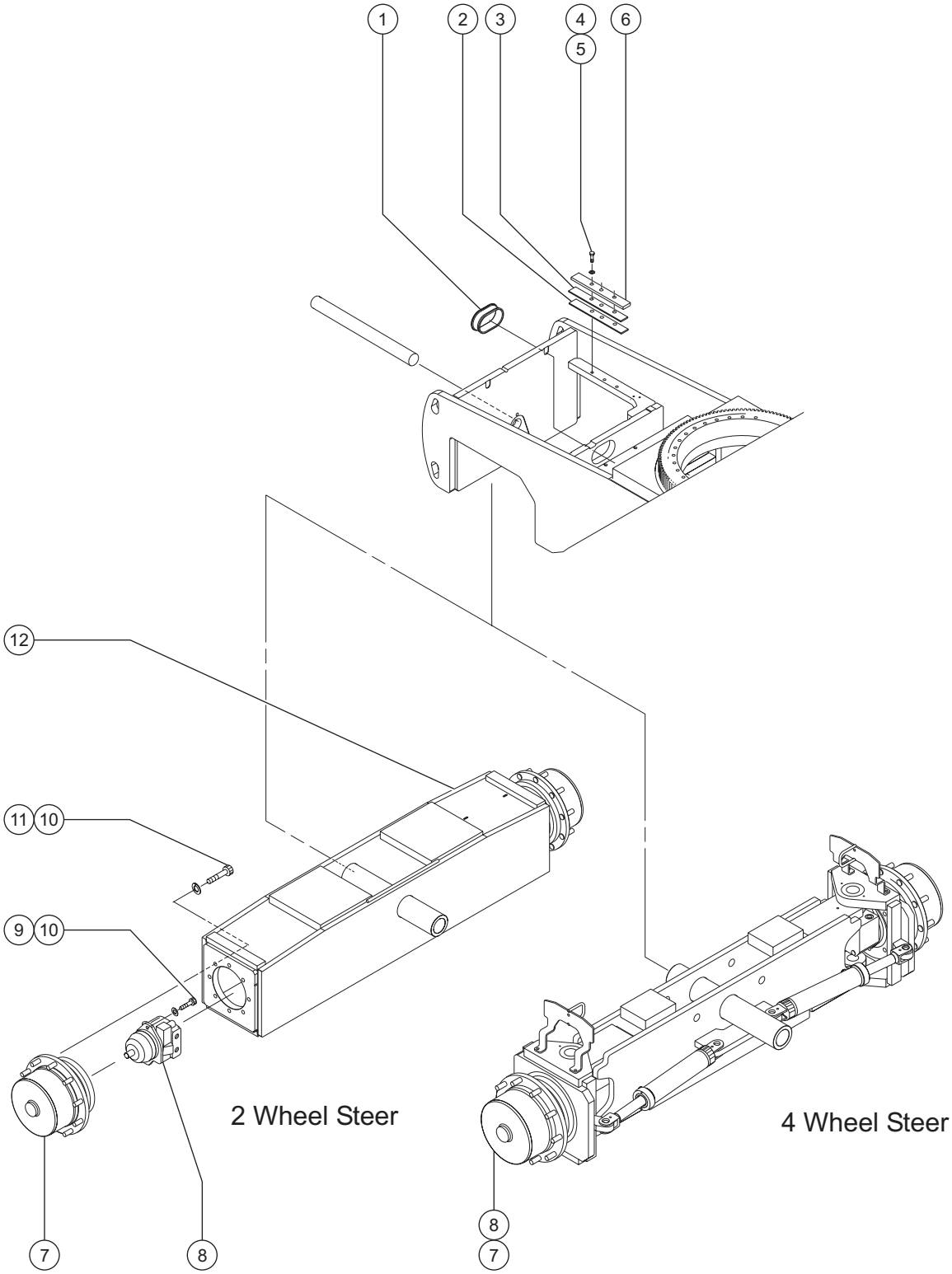
Item	Part No.	Description	Qty.
1	88258	Tire and Wheel Assembly, Foam-filled, Engine Side	2
—	88259	Tire and Wheel Assembly, Foam-filled, Tank Side	
—	101945	Tire and Wheel Assembly Foam-filled, Engine Side Non-marking	
—	101944	Tire and Wheel Assembly Foam-filled, Tank Side Non-marking	
—	101769	Tire and Wheel Assembly, Engine Side, High Flotation	
—	101770	Tire and Wheel Assembly, Tank Side, High Flotation	
1	101011	Wheel, 28 x 15 inches, High Flotation	2
—	101234	Tire, 445D, 50/710, 18 PR, High Flotation	
2	75101	Screw - SHC, 1/2 -13 x 1.25 inches, GR 8	2
3	13064	Hardened Flat Washer, 5/8 inch	2
4	81382	Hydraulic Drive Motor (before serial number 539)	2
—	77806	Seal Kit	
4	102777	Hydraulic Drive Motor (after serial number 538)	2
—	102155	Ball Bearing	
—	102156	Seal	
—	102555	Viton O-ring, 0.103 x 3.737, 75D	
—	102157	Viton O-ring, 0.07 x 0.239, 75D	
—	72883	Shaft	
—	102160	Retaining Ring	
5	77527	O-ring, Drive Motor (before serial number 539)	2
6	73455	Screw - HHC, 5/8 -11 x 2.25 inches, GR 8 (before serial number 539)	16
—	102790	Screw - HHC, 5/8 -11 x 3.25 inches, GR 8 (after serial number 538)	
7	81381	Drive Hub with Brake, 60.2:1 (before serial number 539) (shown)	2
—	77526	Seal Kit	
—	77525	Brake Disc Kit	
—	58279	Wheel Drive Cap	
—	58280	Cap Screw	
—	101284	Wheel Stud, 3/4 -16 x 60 mm	
—	102169	Shaft O-ring	
—	102170	Cover O-ring	
—	102491	Disconnect Rod O-ring	
—	102492	Gear Ring O-ring	
—	102493	Shaft Seal O-ring	
—	102494	Dowel Sleeve Spring	
7	102778	Drive Hub with Brake, 59.3:1 (after serial number 538)	2
—	102557	Seal Kit	
—	102558	Bearing Kit	
—	58284	Cover	
—	33441	Wheel Stud, 3/4 -16	
—	22811	O-ring, Brake	
—	102535	Brake Disc Kit	
—	102536	O-ring Kit, Brake	
7	81383	Drive Hub with Brake, 92.5:1 (high flotation tire)	2
—	101533	Seal Kit (high flotation tire)	
—	101534	Brake Disc Kit (high flotation tire)	
8	88066	Pivot Pin, 4.25 x 1.75 inches	2
9	60618	Steer Sensor Activator	2
—	60747	Shim	
10	61662-S	Hose Bracket	2
11	Ref.	Steer Sensor Assembly (refer to 201.1)	
12	8255	Screw - HHC, 3/8 -16 x 0.75 inch, GR 5	
13	6021	Lock Washer, 3/8 inch	

Figure	Rev	Description
203.1	C	Front Steer Axle



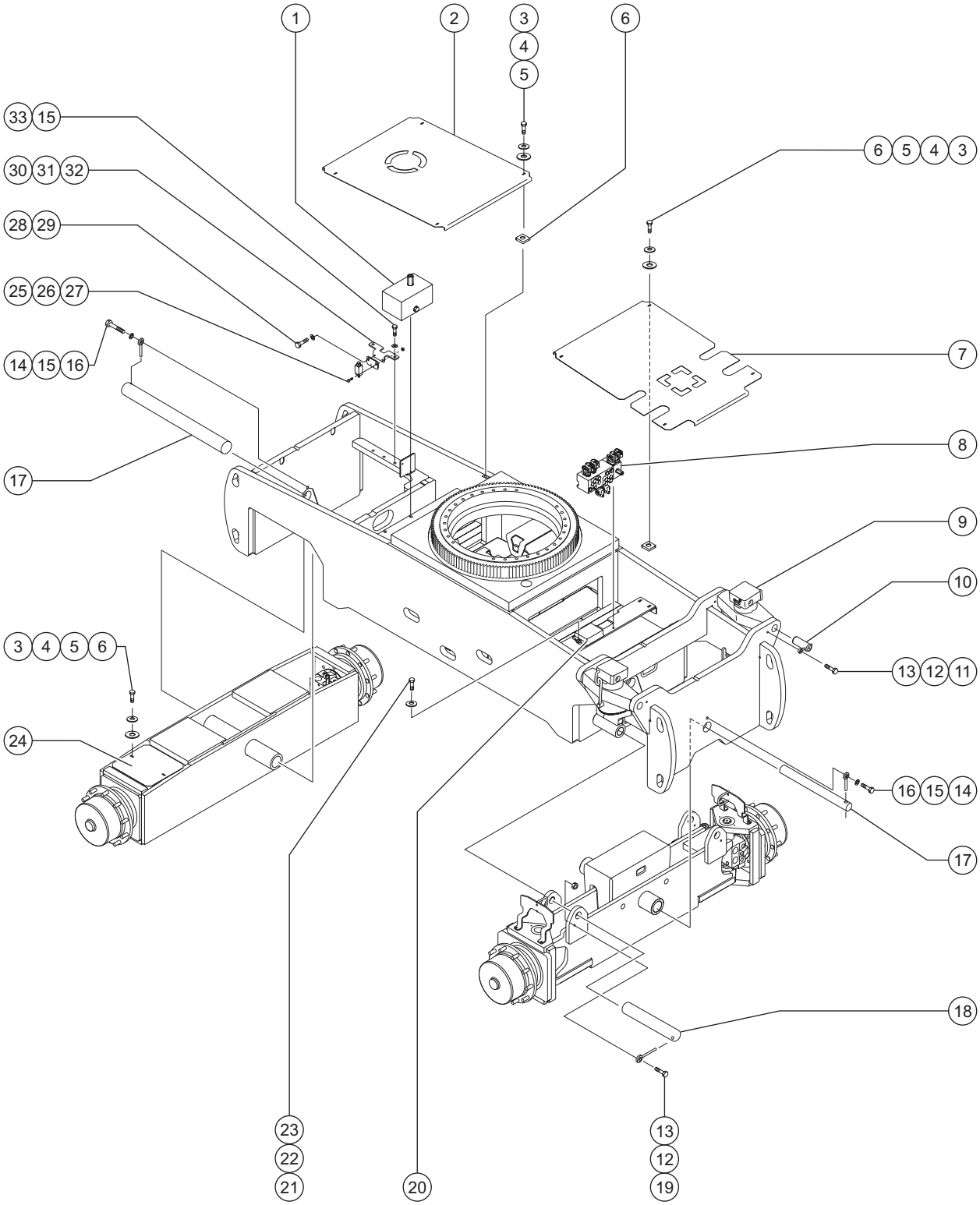
Item	Part No.	Description	Qty.
1	59370	Steer Cylinder	2
—	88349	Seal Kit	
2	8255	Screw - HHC, 3/8 -16 x 0.75 inch, GR 5	
3	6021	Lock Washer, 3/8 inch	
4	25284	Rod End, 0.375 x 2.25 inches	4
5	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
6	88241	Steer Yoke Shim	as needed
7	6097	Flat Washer, 3/8 inch	
8	88069	Pivot Pin Retainer	2
9	25817	Bearing, 1 x 1.25 x 1 inch	2
10	88066	Pivot Pin, 4.25 x 1.75 inches	2
11	81985-S	Yoke Assembly - Tank Side (includes items 9 and 17)	1
12	45226	Rod End, 0.375 x 3.69 inches	2
13	88067	Pivot Pin, 4.25 x 1.75 inches	2
14	27698	Bearing, 2.5 x 2.75 x 2 inches	2
15	82908	Front Axle Assembly (includes items 14 and 17)	1
16	60555	Thrust Washer, 1.81 x 5 x 0.25 inch	
17	30221	Bearing, 1.75 x 2 x 1.5 inches	4
18	Ref.	Yoke Assembly - Engine Side (refer to 201.1)	
19	30734	Pivot Pin, 2.88 x 1 inch	4

Figure	Rev	Description
204.1	C	Rear Axle



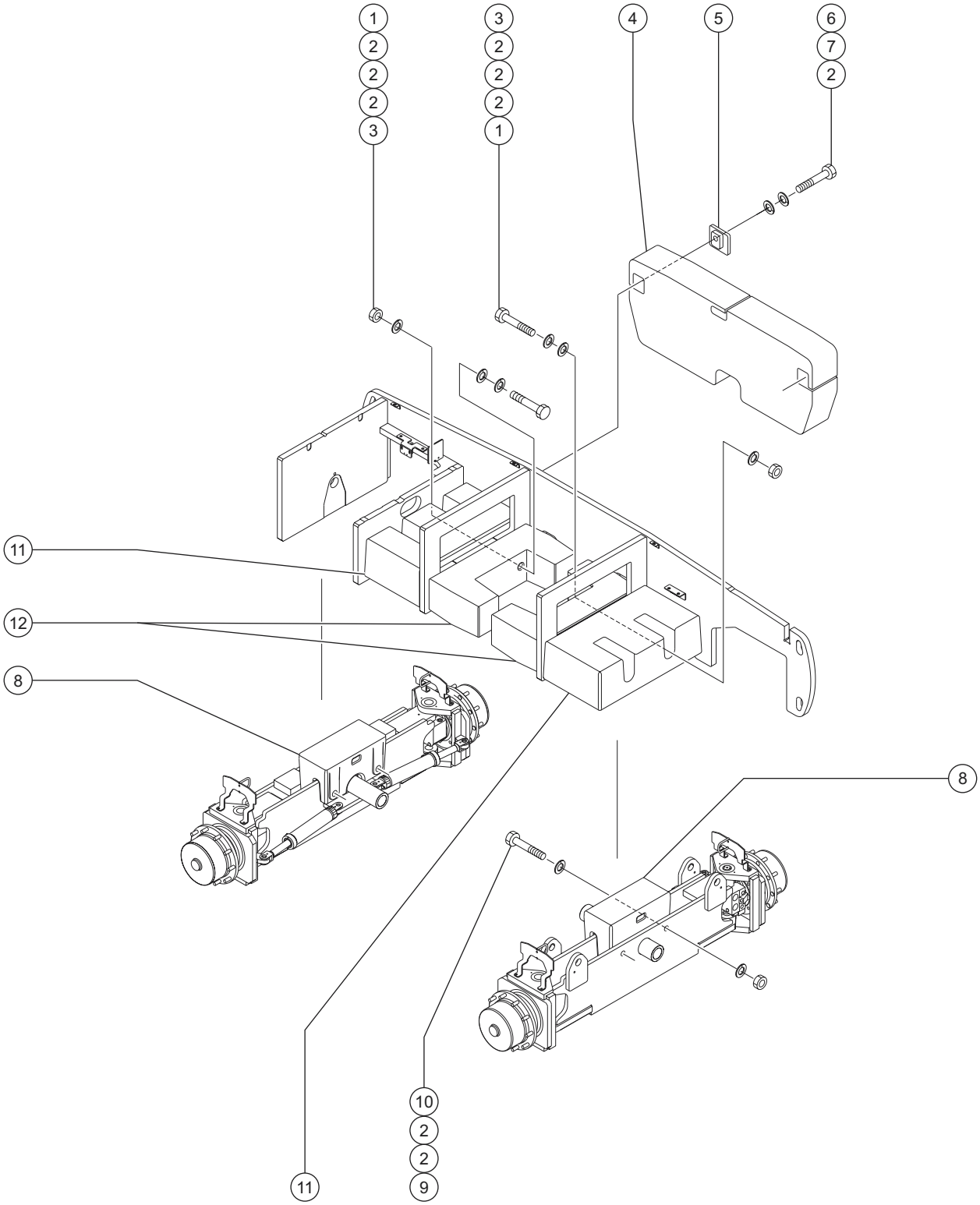
Item	Part No.	Description	Qty.
1	53387	Hose Protector	1
2	81610	Axle Rotation Stop Shim 16.13 x 1.5 x 0.034 inch	as needed
3	81609	Axle Rotation Stop Shim 16.13 x 1.5 x 0.06 inch	as needed
4	9145	Screw - HHC, 1/2 -13 x 2.5 inches, GR 5	
5	6033	Lock Washer, 1/2 inch	
6	88092P	Axle Rotation Stop Bar	2
7	Ref.	Drive Hub with Brake, 4WD (refer to 202.1)	
7	81383	Drive Hub with Brake, 2WD, 92.5:1	2
—	101533	Seal Kit	
—	101534	Brake Disc Kit	
8	Ref.	Hydraulic Drive Motor, 4WD (refer to 202.1)	
8	88351	Hydraulic Drive Motor, 2WD	2
—	77806	Seal Kit	
9	75101	Screw - SHC, 1/2 -13 x 1.25 inches, GR 8	8
10	13064	Hardened Flat Washer, 5/8 inch	24
11	73455	Screw - HHC, 5/8 -11 x 2.25 inches, GR 8	16
12	101531	Rear Axle Assembly, 2 Wheel Steer	1
—	102941	Rear Axle Assembly, 4 Wheel Steer	

Figure	Rev	Description
205.1	B	Axle Installation



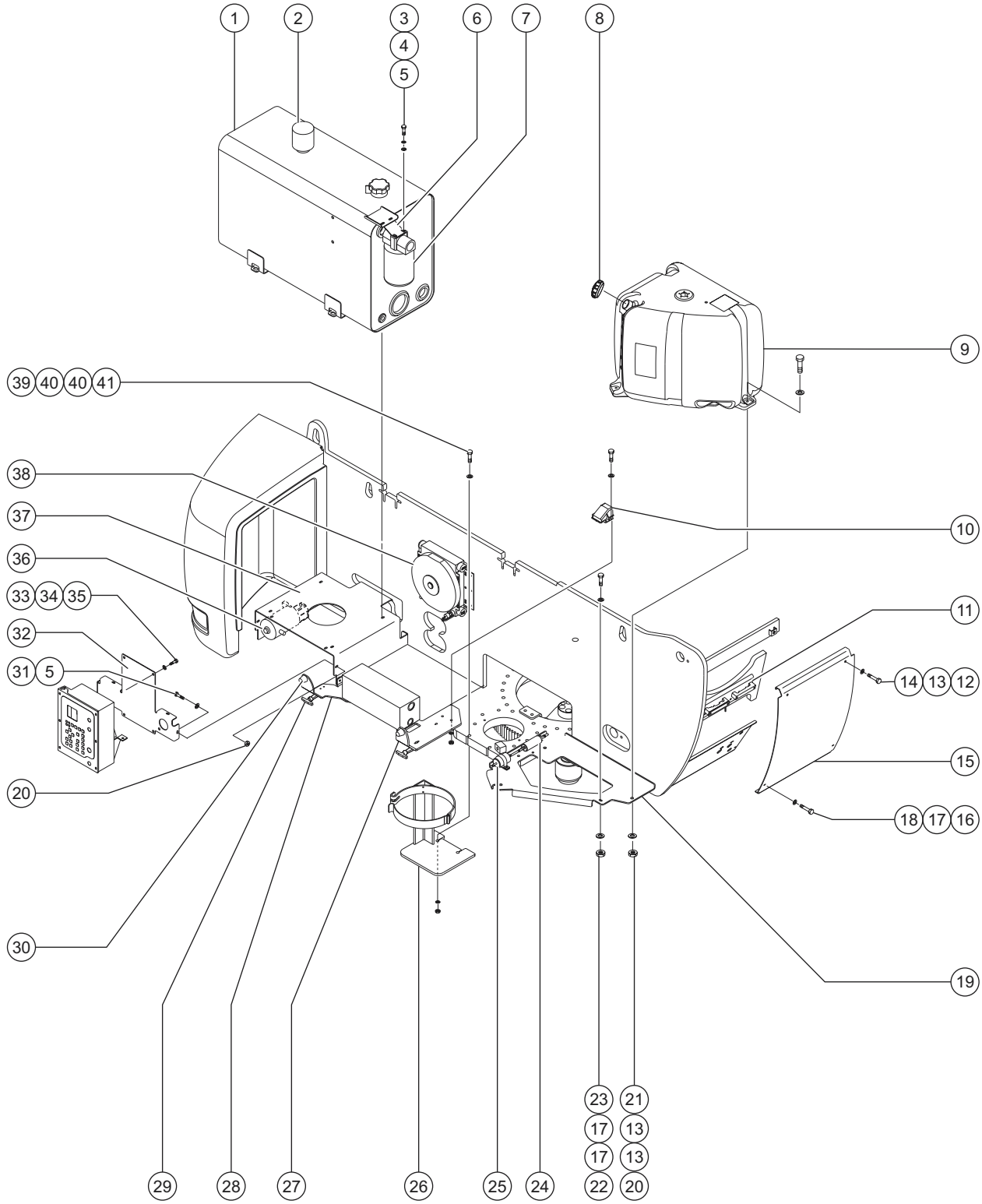
Item	Part No.	Description	Qty.
—	88147	Wire Harness Assembly, 2 Wheel Steer	
—	88139	Wire Harness Assembly, 4 Wheel Steer	
1	Ref.	Traction Manifold (refer to 701.1 or 703.1)	
2	101529	Drive Chassis Cover Assembly with Decals (circle end)	1
3	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
4	6356	Lock Washer, 1/4 inch	
5	6638	Flat Washer, 1/4 inch	
6	25969	Spring Clip, 1/4 -20	8
7	101530	Drive Chassis Cover Assembly with Decals (square end)	1
8	Ref.	2WD Oscillate Manifold (refer to 702.1)	
—	Ref.	4WD Oscillate Manifold (refer to 704.1)	
9	81330	Oscillate Cylinder	2
—	77519	Seal Kit	
—	33428	Counterbalance Valve, 3000 psi / 206.8 bar	
—	43018	Seal Kit	
10	81498	Pivot Pin, 4.25 x 1.75 inches	4
11	8178	Screw - HHC, 3/8 -16 x 2.5 inches, GR 5	
12	45226	Rod End, 0.375 x 3.69 inches	4
13	4828	Nylock Nut, 3/8 -16	
14	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
15	6033	Lock Washer, 1/2 inch	
16	30418	Rod End, 0.5 x 3.75 inches	1
17	81378	Pivot Pin, 27.63 x 2.5 inches	1
18	81598	Pivot Pin, 10.75 x 1.75 inches	2
19	5224	Screw - HHC, 3/8 -16 x 2 inches, GR 5	
20	50154	Drive Chassis Controller (DCON)	1
21	10107	Screw - HHC, 5/16 -18 x 0.75 inch, GR 5	
22	5397	Flat Washer, 5/16 inch	
23	6782	Nylock Nut, 5/16 -18	
24	88210P	Rear Axle Cover	2
25	49819	Screw - PHPM, 10-32 x 0.5 inch	
26	6607	Lock Washer, #10	
27	6178	Nylock Nut, 10-32	
28	8255	Screw - HHC, 3/8 -16 x 0.75 inch, GR 5	
29	6021	Lock Washer, 3/8 inch	
30	88082P	Switch Mount Bracket	2
31	88083P	Switch Mount Plate	2
32	88383	Limit Switch Wire Harness Assembly, Left (shown)	2
—	88382	Limit Switch Wire Harness Assembly, Right	
—	46409	Limit Switch	
33	9145	Screw - HHC, 1/2 -13 x 2.5 inches, GR 5	

Figure	Rev	Description
206.1	A	Drive Chassis and Axle Weights



Item	Part No.	Description	Qty.
1	29764	Nylock Nut, 1-8	
2	38859	Flat Washer, 1 x 2.5 x 0.14 inch	
3	35955	Screw - HHC, 1-8 x 19 inches	
4	94723	Drive Chassis Weight, 2750.2 lbs., Engine Side (Hi-flotation option)	1
—	111533	Drive Chassis Weight, 2748.07 lbs., Tank Side (Hi-flotation option)	1
5	94726	Drive Chassis Weight Plug (Hi-flotation option)	4
6	30798	Screw - HHC, 1 -8 x 4.5 inches, GR 5 (Hi-flotation option)	
7	29605	Lock Washer, 1 inch (Hi-flotation option)	
8	88483	Axle Weight, 500 lbs. (2 wheel steer)	1
		(4 wheel steer)	2
9	101402	Low Profile Nylock Nut, 1-8	
10	73928	Screw - HHC, 1-8 x 11 inches, GR 5	
11	88482	Drive Chassis Weight, 1400 lbs. End	2
12	34767	Drive Chassis Weight, 770 lbs., Center	2

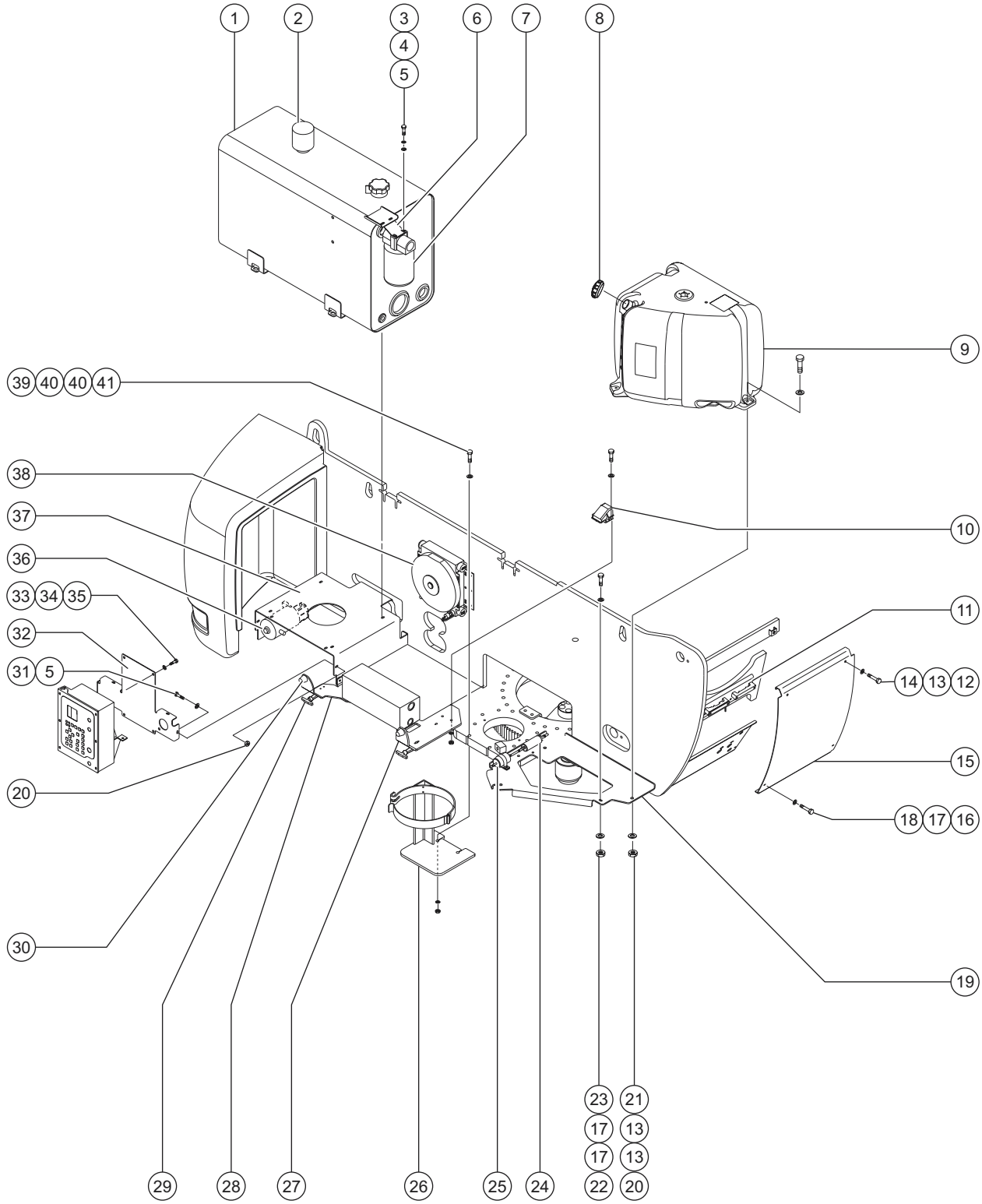
Figure	Rev	Description
301.1	B	Hydraulic and Fuel Tanks



Item	Part No.	Description	Qty.
—	88154	Battery to Auxiliary Power Unit Solenoid Harness	
—	88155	Auxiliary Power Unit to Engine Block Harness	
1	61413	Hydraulic Tank, 45 gallons	1
—	75257	Strainer Assembly, 24 SAE	
—	75253	Strainer Assembly, 16 SAE	
—	102524	Hydraulic Tank Cap	
2	60559	Breather Filter, 3 Micron	1
3	13002	Screw - HHC, 5/16 -18 x 1 inch, GR 5	
4	6886	Lock Washer, 5/16 inch	
5	5397	Flat Washer, 5/16 inch	
6	60936P	Return Filter Bracket	1
7	60508	Return Filter, 10 Micron	1
—	61326	Filter Element	
8	53209	Fuel Cap, Green (diesel models)	1
—	53210	Fuel Cap, Red (gasoline/LPG models)	
9	77675	Fuel Tank, 40 gallons	1
—	61234	Fuel Return Tube (Deutz models)	
—	88090	Fuel Return Tube (Gasoline/LPG models)	
—	88091	Fuel Return Tube (Perkins models)	
—	61240	Fuel Tank Fitting	
10	50161	Turntable Tilt Sensor	1
11	88227P	Hose Protector Bracket	1
—	88107	Clamp, Left Side	
—	102309	Clamp, Right Side	
12	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
13	6097	Flat Washer, 3/8 inch	
14	29868	Spring Clip, 3/8 -16	2
15	88121P	Turntable Cover, Upper Center	1
16	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
17	6638	Flat Washer, 1/4 inch	
18	56912	Spring Clip, 1/4 -20	2
19	81829P	Fuel Tank Tray	1
20	4828	Nylock Nut, 3/8 -16	
21	5224	Screw - HHC, 3/8 -16 x 2 inches, GR 5	
22	8914	Screw - HHC, 1/4 -20 x 0.625 inch, GR 5	
23	6091	Nylock Nut, 1/4 -20	
24	77536	Fuel Pump (gasoline/LPG models) (before serial number 363)	1
—	77219	Fuel pump (gasoline/LPG models) (after serial number 362)	
25	65626	Fuel Filter (gasoline/LPG models) (before serial number 363)	1
—	52761	Fuel Filter (gasoline/LPG models) (after serial number 362)	
26	88270	LPG Tank Mount	1
27	88045P	Manifold Support Bracket (right)	1
28	88046P	Manifold Support Bracket (left)	1
29	45363	Draw Latch	2
—	75041	Screw - PHM, 10-32 x 1 inch	
—	6146	Flat Washer, #10	
—	6178	Nylock Nut, 10-32	
30	30973	Rubber Bumper	2
—	5397	Flat Washer, 5/16 inch	
—	6782	Nylock Nut, 5/16 -18	
31	6019	Screw - HHC, 3/8 -16 x 1.25 inches, GR 5	
32	88105P	Control Box Mount	1
33	8914	Screw - HHC, 1/4 -20 x 0.625 inch, GR 5	
34	6356	Lock Washer, 1/4 inch	
35	6638	Flat Washer, 1/4 inch	

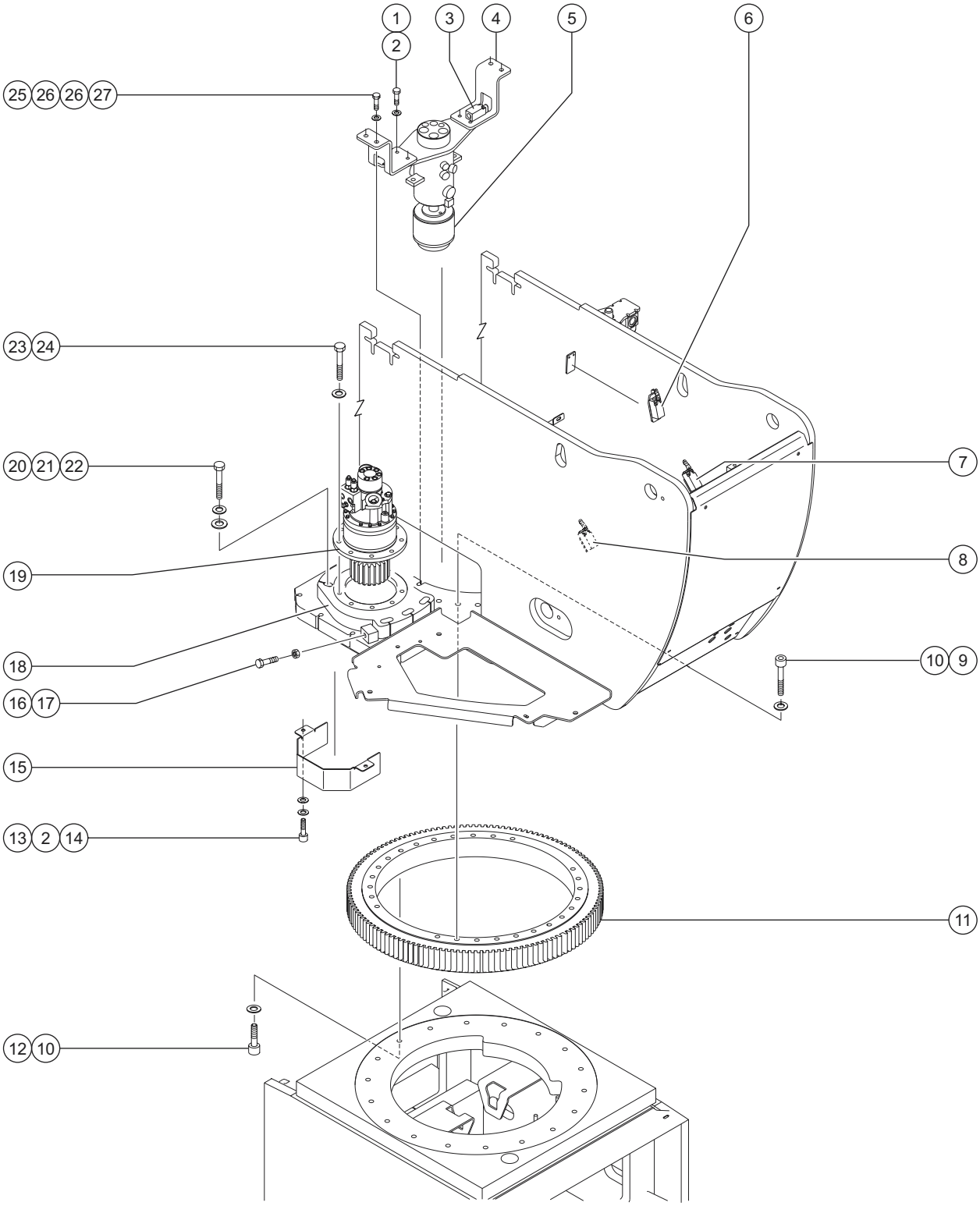
This list continues on the next page.

Figure	Rev	Description
301.1	B	Hydraulic and Fuel Tanks



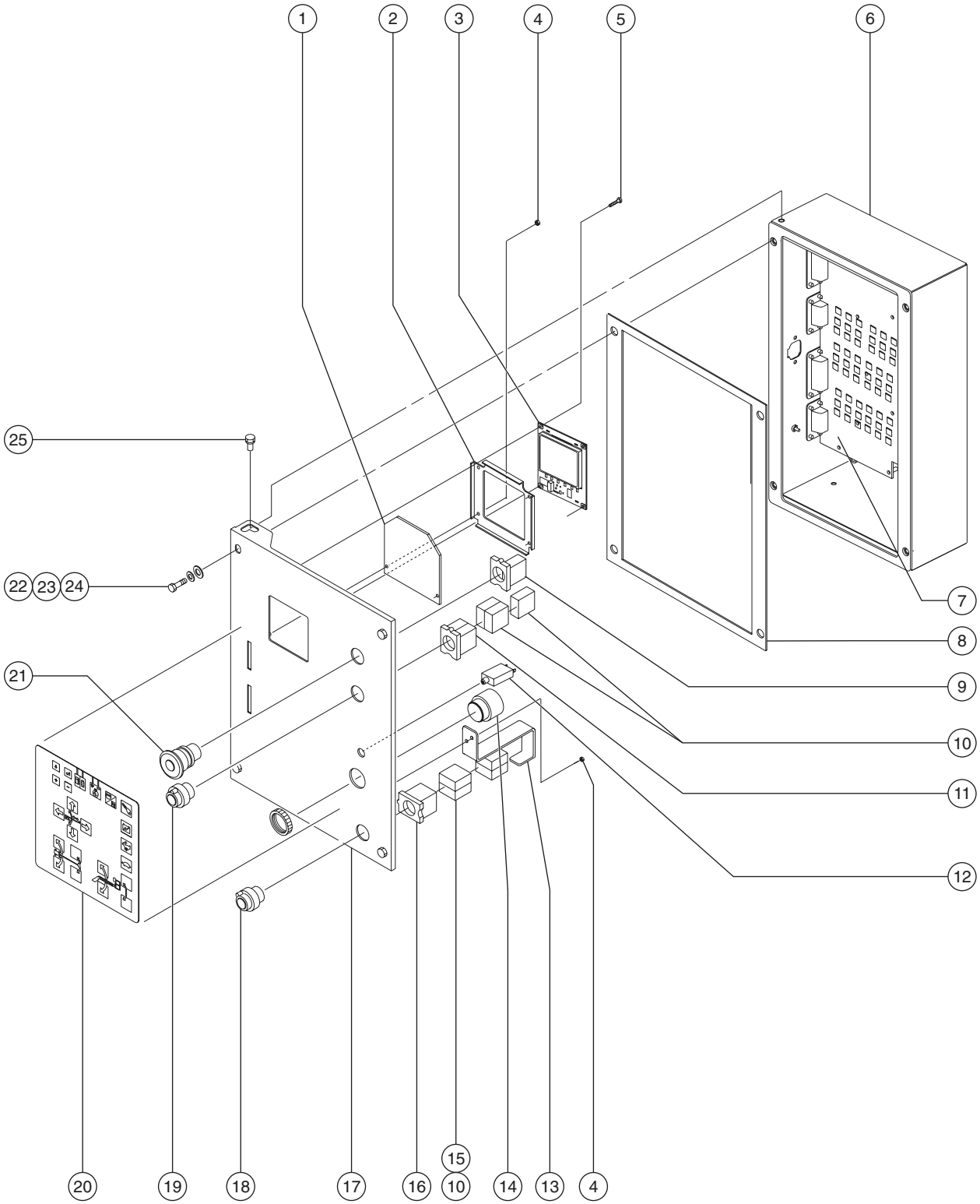
Item	Part No.	Description	Qty.
36	75592	Auxiliary Pump, 12V DC (before serial number 529)	1
—	102710	Auxiliary Pump, 12V DC (after serial number 528)	
—	62412	Solenoid	
37	88044P	Hydraulic Tank Support	1
38	71259	Oil Cooler with Fan, 12V DC	1
—	75854	Fan	
—	75855	Thermostat	
—	13918	Screw - HHC, 3/8 -16 x 1.75 inches, GR 8	4
—	6097	Flat Washer, 3/8 inch	
—	4828	Nylock Nut, 3/8 -16	
39	8357	Screw - HHC, 1/2 -13 x 3.5 inches, GR 5	
40	6095	Flat Washer, 1/2 inch	
41	6198	Nylock Nut, 1/2 -13	

Figure	Rev	Description
302.1	C	Turntable Rotator and Hydraulic Rotary Coupler Installation



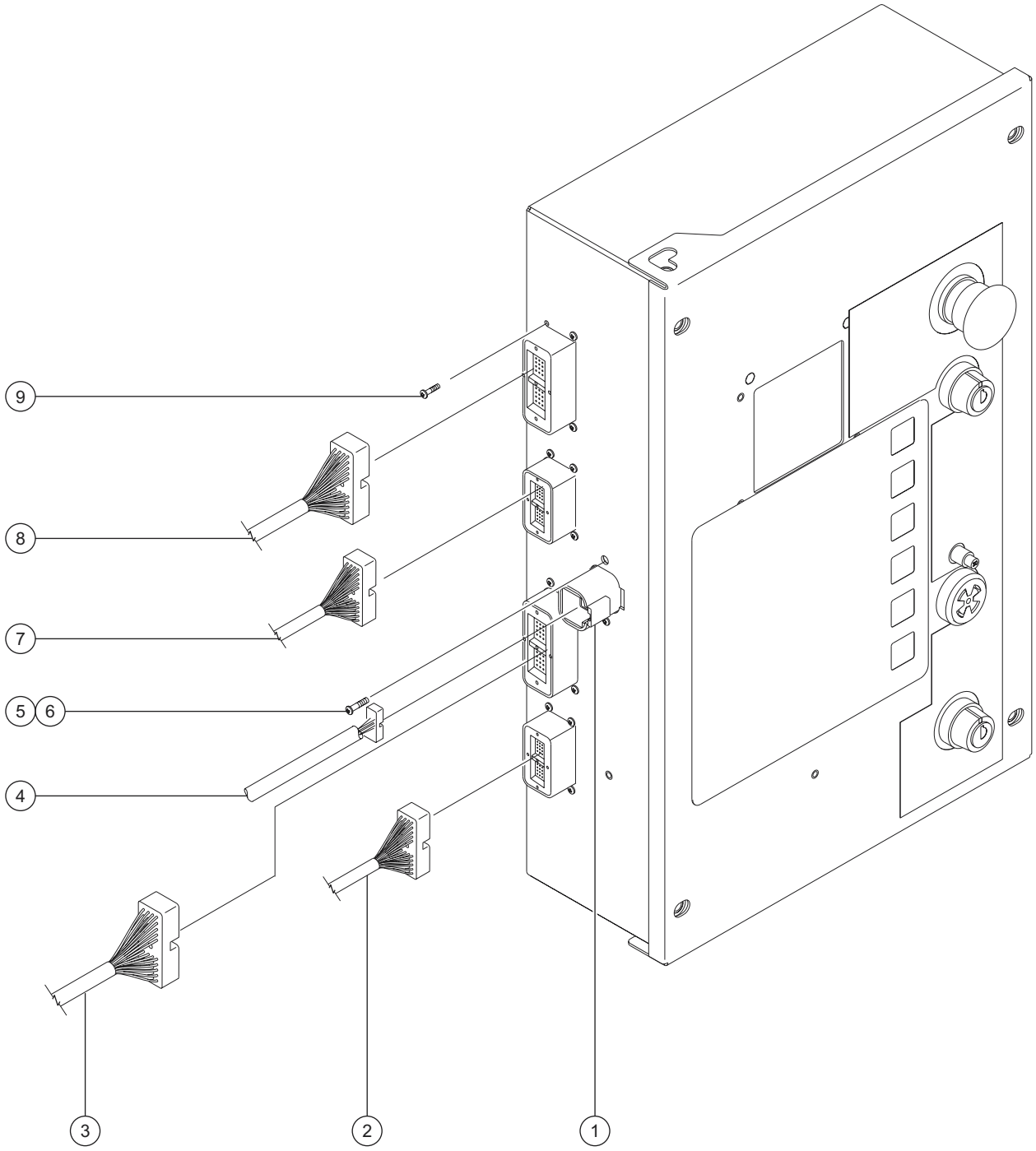
Item	Part No.	Description	Qty.
1	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
2	6021	Lock Washer, 3/8 inch	
3	88368	Limit Switch Wire Harness Assembly (drive enable)	
—	88356-43103	Limit Switch	
—	150127	Contacts	
—	97128	Roller Arm	
4	60575P	Hydraulic Swivel Rotator Mount Bracket	2
5	70238	Hydraulic/Electric Rotator Coupler Assembly	1
—	88291	Hydraulic Rotator	
—	88293	Seal Kit	
6	88365	Limit Switch Wire Harness Assembly (secondary boom angle)	
—	88356-41163	Limit Switch	1
—	150127	Contacts	
—	89757	Roller Arm	
7	88156	Limit Switch Wire Harness Assembly (secondary boom 35° angle)	
—	88356-41163	Limit Switch	1
—	150127	Contacts	
—	89757	Roller Arm	
8	88364	Limit Switch Wire Harness Assembly (secondary boom angle, safety)	
—	88356-21163	Limit Switch	1
—	97231	Contacts	
—	97128	Roller Arm	
9	45495	Screw - SHC, 5/8 -11 x 3 inches, GR 8	30
10	13064	Hardened Flat Washer, 5/8 inch	48
11	30895	Turntable Rotate Bearing	1
12	20654	Screw - SHC, 5/8 -11 x 3.5 inches, GR 8	18
13	8255	Screw - HHC, 3/8 -16 x 0.75 inch, GR 5	
14	6638	Flat Washer, 1/4 inch	
15	88314P	Pinion Gear Guard	1
16	61128	Screw - HHC, 3/4 -10 x 4 inches, GR 5	
17	6126	Jam Nut, 3/4 -10	1
18	81516	Backlash Plate	1
19	73965	Drive Hub - Turntable Rotation, 36:1 (before serial number 237)	1
—	65617	Seal Kit	
—	81331	Turntable Rotation Brake	
—	65618	Seal Kit	
—	81366	Turntable Rotation Manifold	
—	83009	Counterbalance Valve, 100 psi / 6.8 bar	
—	44957	Shuttle Valve	
—	53999	Turntable Rotation Motor	
—	65616	Seal Kit	
19	88921	Turntable Rotator Assembly, Complete (after serial number 236)	1
—	58304	Shaft	
—	65617	Seal Kit - Drive Hub	
—	94620	Seal Kit - Swing Torque Hub	
—	94621	Turntable Motor	
—	94622	Brake Port Hardline	
—	94623	Friction Disc Kit	
—	94624	Brake Spring Kit	
—	94625	Seal Kit - Brake Kit	
—	94626	Turntable Rotation Brake	
—	83009	Counterbalance Valve, 100 psi / 6.8 bar	
—	45957	Shuttle Valve	
—	81366	Turntable Rotation Manifold	
20	88212	Screw - SHC, 3/4 -10 x 3 inches, GR 8	6
21	34550	Lock Washer, 3/4 inch	
22	33278	Hardened Flat Washer, 3/4 inch	6
23	94747	Screw - HHC, 1/2 -13 x 1.75 inches, GR 8	6
24	13066	Hardened Flat Washer, 1/2 inch	6
25	6605	Screw - HHC, 3/8 -16 x 3.5 inches, GR 5	
26	6095	Flat Washer, 1/2 inch	
27	6198	Nylock Nut, 1/2 -13	

Figure	Rev	Description
303.1	B	Ground Control Box - View 1



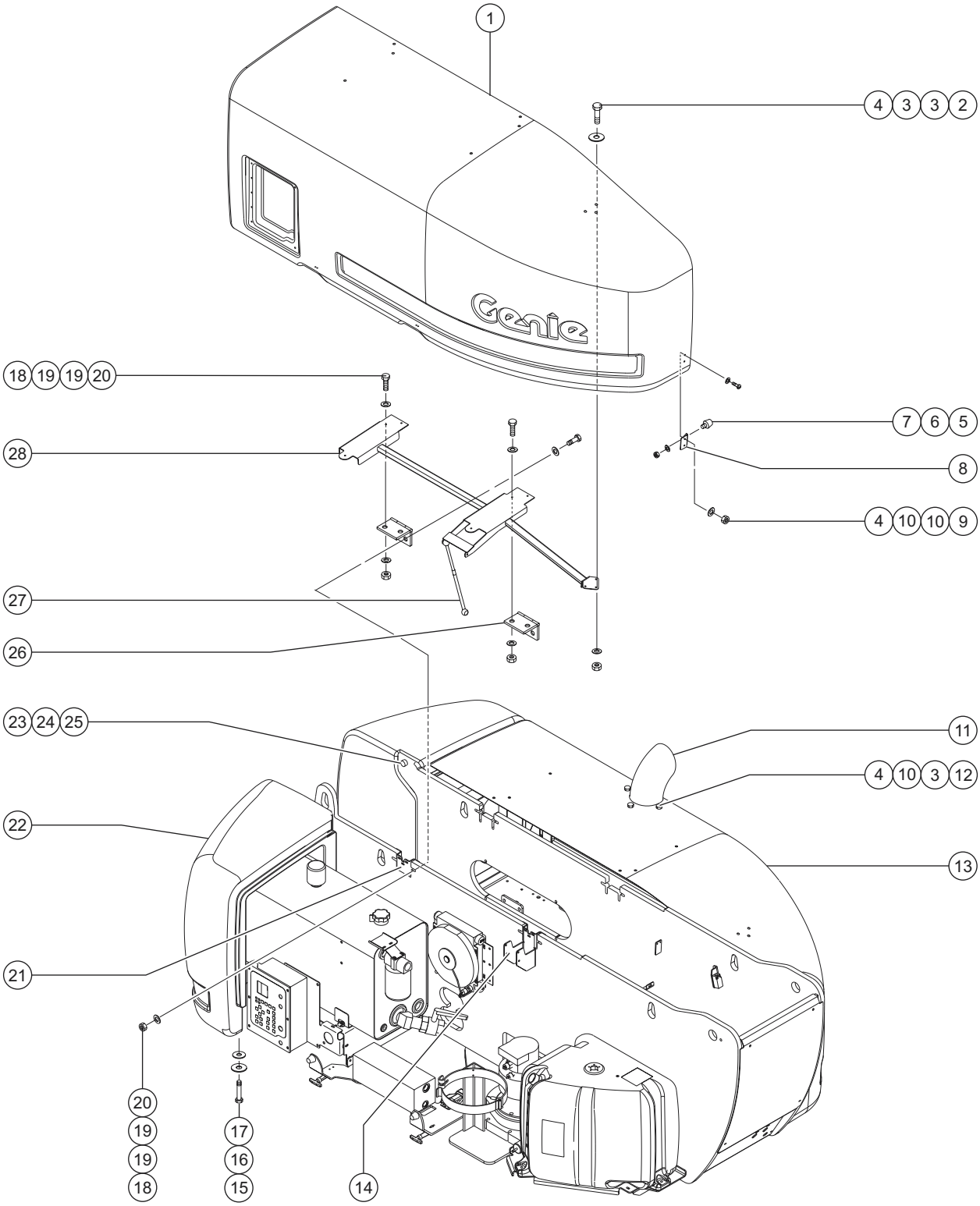
Item	Part No.	Description	Qty.
—	77510	Ground Control Box Assembly, Complete (before serial number 258)	
—	94628	Ground Control Box Assembly, Complete (after serial number 257)	
—	88141	Wire Harness Assembly, Ground Control Box	
1	62374	Liquid Crystal Display Lens (LCD)	1
2	62375	Liquid Crystal Display Lens Clip (LCD)	1
3	88056	Printed Circuit Board Assembly, Liquid Crystal Display (LCD)	1
4	12344	Nylock Nut, 6-32	
5	81551	Screw - PHPM, 6-32 x 0.25 inch	
6	77509	Ground Control Box Enclosure with Decal (includes items 8 and 17)	1
—	82269	Decal - Ground Control Panel	
7	88055	Printed Circuit Board - Ground Control (before serial number 258)	1
—	94946	Printed Circuit Board - Ground Control (from serial number 257 to 453)	
—	102410	Printed Circuit Board - Ground Control (after serial number 453)	
8	88177	Ground Control Box Gasket	1
9	66817	Base with 1 N.C. Contact	1
—	66818	Contact - N.C.	
10	29732	Contact - N.C.	5
11	32615	Base with 2 N.C. Contacts	1
—	29732	Contact - N.C.	
12	47899	Circuit Breaker, 20A (includes mounting nut)	1
13	94524P	Contact Bracket	1
14	62379	Alarm - Steady Tone, 12V DC	1
—	72326	Retainer Nut	
15	45081	Contact - N.O.	2
16	62380	Base with 1 N.O. and 1 N.C. Contact	1
—	29732	Contact - N.C.	
—	45081	Contact - N.O.	
17	88097P	Ground Control Box Lid	1
18	88150	Service Bypass Key Switch, 3 position (before serial number 214)	1
—	88317	Base	
—	21982	Key	
—	37947	Key (package of 10 keys)	
18	62381	Service Bypass Key Switch, 3 position (after serial number 213)	1
—	88317	Base	
—	21982	Key	
—	37947	Key (package of 10 keys)	
19	66811	Key Switch, 3 position (before serial number 214)	1
—	21982	Key	
—	37947	Key (package of 10 keys)	
19	32612	Key Switch, 3 position (after serial number 213)	
—	21982	Key	
—	37947	Key (package of 10 keys)	
20	88057	Membrane Switch, Ground Controls	1
21	66812	Red Push Button - Emergency Stop	1
22	7339	Screw - HHC, 1/4 -20 x 0.5 inch, GR 5	
23	6356	Lock Washer, 1/4 inch	
24	6638	Flat Washer, 1/4 inch	
25	8914	Screw - HHC, 1/4 -20 x 0.625 inch, GR 5	

Figure	Rev	Description
304.1	A	Ground Control Box - View 2



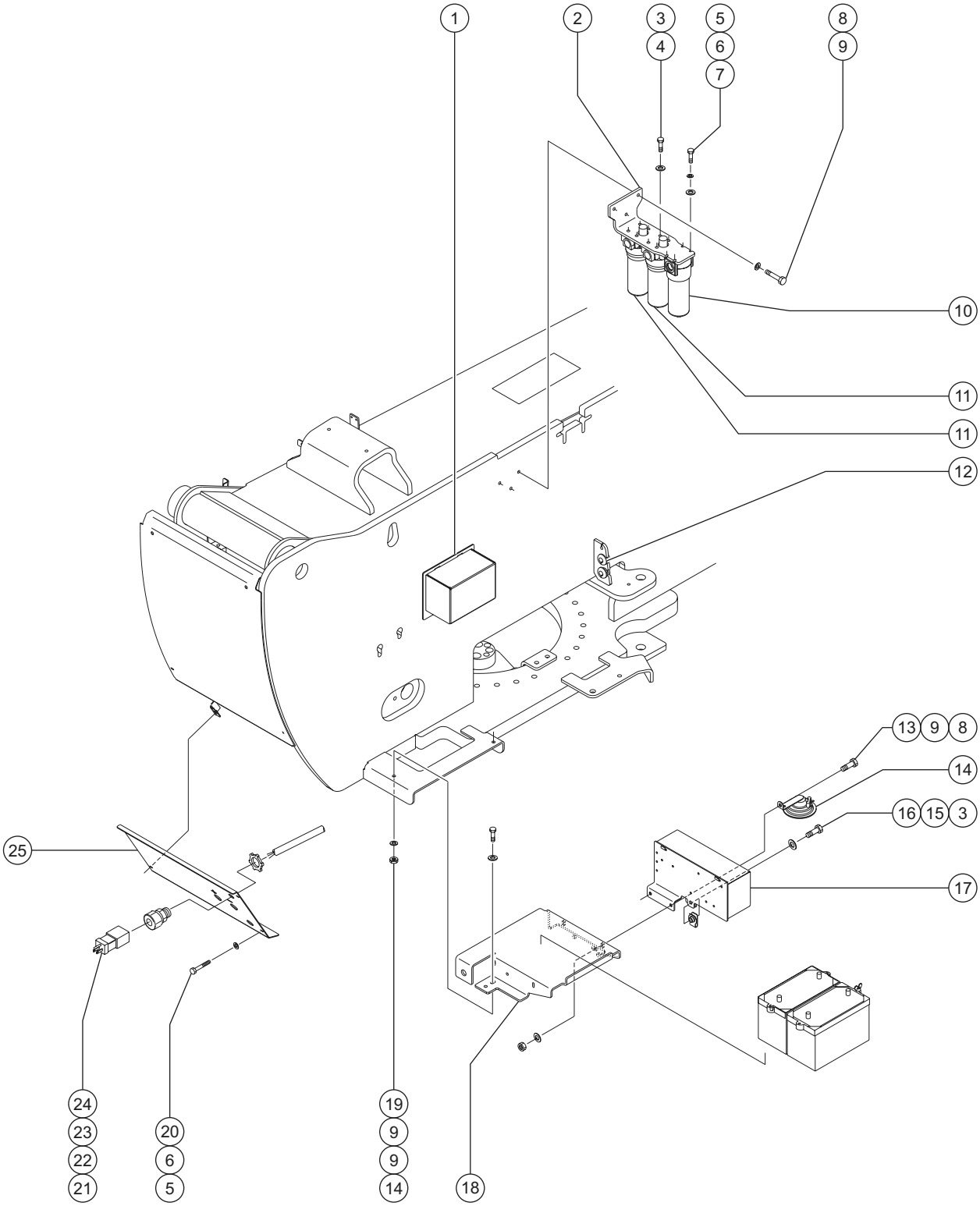
Item	Part No.	Description	Qty.
1	73717	Receptacle, 4 way	1
—	88141	Wire Harness Assembly, Ground Control	
2	88132	Wire Harness Assembly, Secondary Boom	1
—	60512	Plug, 23 way, Black	
3	88133	Wire Harness Assembly, Lower Switch	1
—	60514	Plug, 35 way, Black	
4	88137	Wire Harness Assembly, Power	1
—	60527	Plug, 4 way	
5	49820	Screw - PHPM, 6-32 x 0.5 inch	
6	12344	Nylock Nut, 6-32	
7	88134	Engine Wire Harness Assembly (Deutz models) (before serial number 339)	1
—	101848	Engine Wire Harness Assembly (Deutz models) (after serial number 338)	
—	88135	Engine Wire Harness Assembly (Perkins models) (before serial number 329)	
—	101891	Engine Wire Harness Assembly (Perkins models) (after serial number 328)	
—	88136	Engine Wire Harness Assembly (GM models)	
—	101892	Engine Wire Harness Assembly (Ford models)	
—	60513	Plug, 23 way, White	
8	88138	Wire Harness Assembly, Manifold	1
—	60515	Plug, 35 way, White	
9	102320	Screw - PHM, #4 x 0.375 inch	

Figure	Rev	Description
305.1	C	Turntable Covers



Item	Part No.	Description	Qty.
1	101535	Turntable Cover Assembly with Word Decals, Tank Side (before serial number 801)	1
—	111329	Turntable Cover Assembly with Word Decals, Tank Side (after serial number 800)	1
—	101405	Turntable Cover Assembly with Symbol Decals, Tank Side	
—	81197	Cover Plug	
—	81329	Alarm Beacon Plug	
—	54723	Ground Control Cover Plug	
2	8915	Screw - HHC, 1/4 -20 x 1.25 inches, GR 5	
3	12906	Fender Washer, 0.25 x 1.25 x 0.062 inch	
4	6091	Nylock Nut, 1/4 -20	
5	30973	Rubber Bumper, 1 x 1.25 inches	2
6	5397	Flat Washer, 5/16 inch	
7	6782	Nylock Nut, 5/16 -18	
8	88106P	Cover Stop Bracket	2
9	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
10	6638	Flat Washer, 1/4 inch	
11	101964	Exhaust Tube	1
12	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
13	102969	Turntable Cover Assembly with Word Decals, Engine Side	1
—	102970	Turntable Cover Assembly with Symbol Decals, Engine Side	
—	81197	Cover Plug	
—	81329	Alarm Beacon Plug	
14	81869P	Hinge / Strut Mount	2
15	42229	Screw - HHC, 1-8 x 3.5 inches, GR 5	
16	29605	Lock Washer, 1 inch	
17	13775	Flat Washer, 1.063 x 2 x 0.134 inch	
18	4828	Nylock Nut, 3/8 -16	
19	6097	Flat Washer, 3/8 inch	
20	13918	Screw - HHC, 3/8 -16 x 1.75 inches, GR 8	8
21	81868P	Hinge Mount	2
22	61415	Counterweight, Front, 7250 lbs	1
23	51428	Screw - HHC, 3/4 -10 x 2.75 inches, GR 5	
24	13635-4	Spindle Washer, 500 lbs Boom	2
25	34550	Lock Washer, 3/4 inch	
26	75073	Turntable Cover Hinge	4
27	28301	Gas Strut with Retaining Spring	4
—	27377	Retaining Spring	
—	33555	Ball Stud, 5/16 -18	
—	6002	Low Profile Nylock Nut, 5/16 -18	
28	81874	Cover Support, Tank Side	1
—	81876	Cover Support, Engine Side	

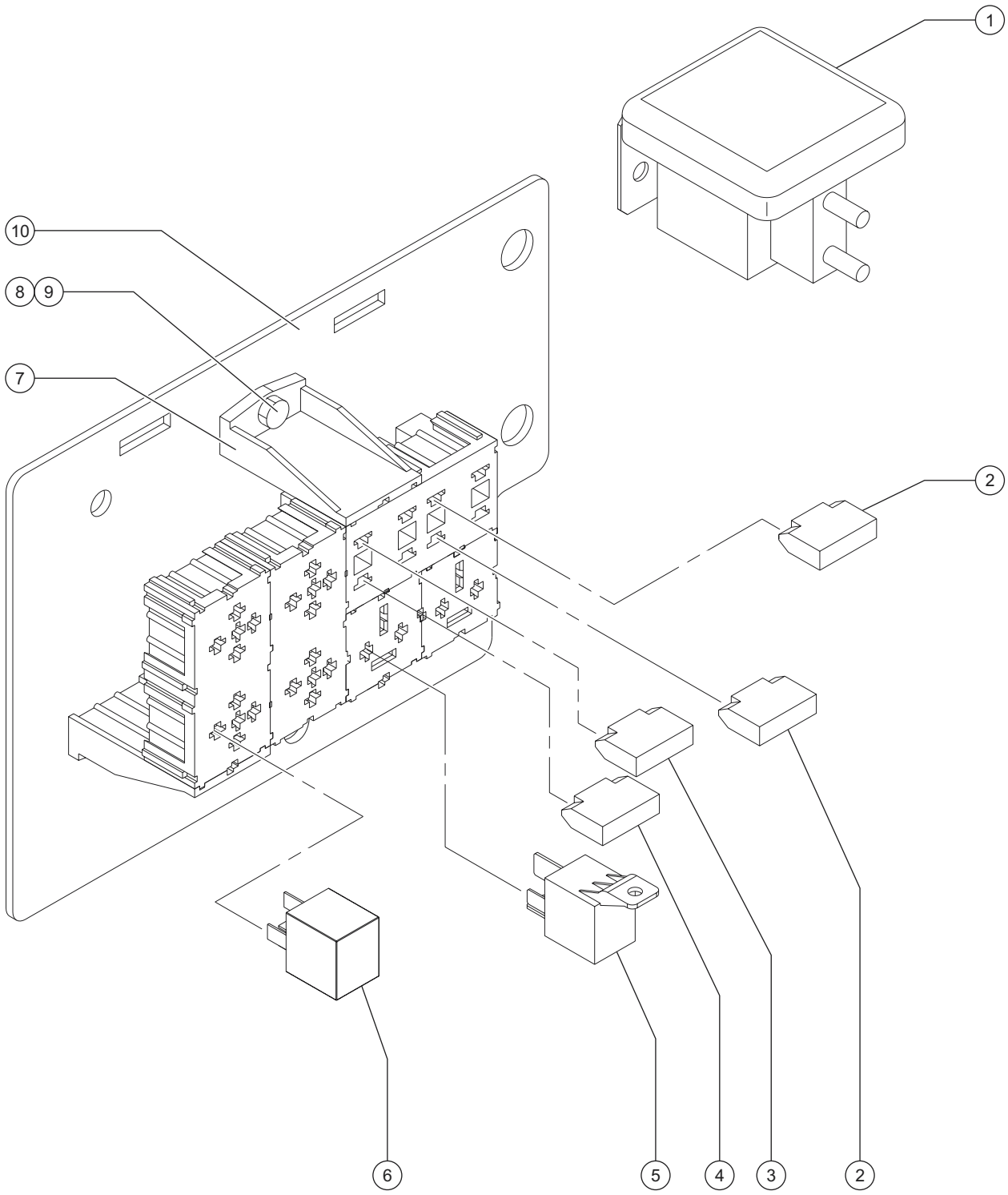
Figure	Rev	Description
306.1	C	Turntable Components, Engine Side



Item	Part No.	Description	Qty.
1	102951	Relay Cover (before serial number 329)	1
—	102952	Relay Cover (from serial number 329 to 776)	
—	45384	Nylon Plug, 0.5 inch	
2	88085P	Filter Bracket	1
3	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
4	6021	Lock Washer, 3/8 inch	
5	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
6	6356	Lock Washer, 1/4 inch	
7	6638	Flat Washer, 1/4 inch	
8	6019	Screw - HHC, 3/8 -16 x 1.25 inches, GR 5	
9	6097	Flat Washer, 3/8 inch	
10	77139	Medium Pressure Hydraulic Filter	1
—	60857	Filter Element	
—	58223	Seal	
11	60334	High Pressure Hydraulic Filter	2
—	58222	O-ring	
—	58223	Seal	
—	60857	Filter Element	
12	61189	Rubber Grommet, 0.75 x 0.38 x 1.13 inches	2
13	4828	Nylock Nut, 3/8 -16	
14	81578	Horn, 12V DC	1
15	5397	Flat Washer, 5/16 inch	
16	29868	Spring Clip, 3/8 -16	
17	102953	Relay Cover (after serial number 776)	1
—	45384	Nylon Plug, 0.5 inch	
18	Ref.	Battery Tray Mount (refer to 420.1)	
19	8516	Screw - HHC, 3/8 -16 x 1.5 inches, GR 5	
20	25969	Spring Clip, 1/4 -20	4

Item	Part No.	Description	Qty.
21	6595	North American Electrical Plug, 110V AC	1
—	19020	3 Pin Electrical Plug (female)	
—	12153	British 3 Pin Electrical Plug, 110V AC	
—	6666	European 2 Pin Electrical Plug, 220V AC	
—	25388	British 3 Pin Electrical Plug, 220V AC	
—	65737	Fuse, 13A	
22	7056	Squeeze Connector, 1/2 inch NPT	1
23	6935	Electric Locknut, 1/2 inch	1
24	30794	Electrical Cord, 12 Ga., 3 Conductor, SJEOW Primary Boom ..... 799 inches Jib Boom ..... 155 inches Secondary Boom ..... 739 inches	
—	88398	Upper Wire Harness - Power to Platform	
—	88399	Lower Wire Harness - Power to Platform	
25	88120P	Lower Turntable Cover	1

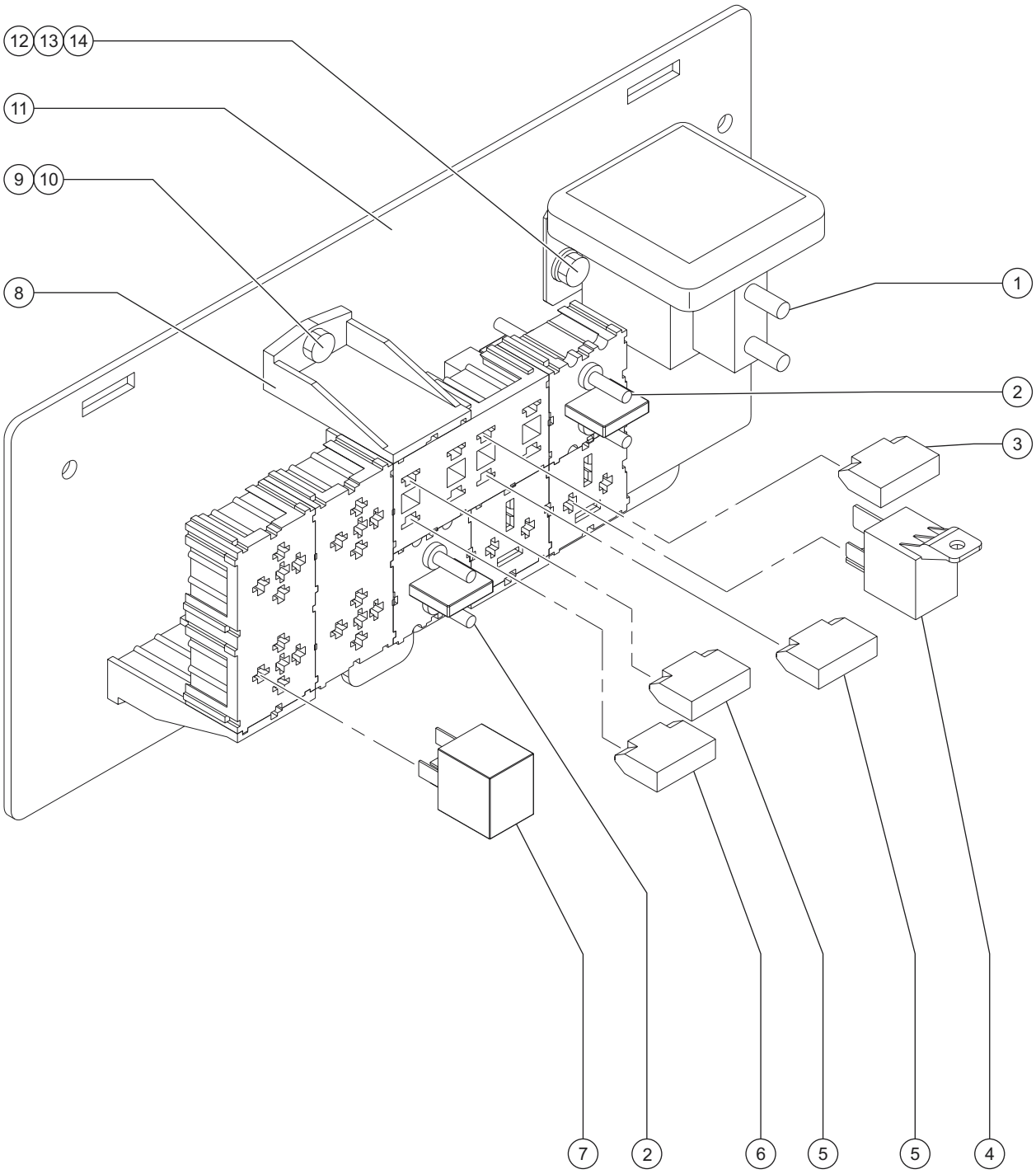
Figure	Rev	Description
307.1	A	Turntable Components - Relay Panel (before serial number 339)



Item	Part No.	Description	Qty.
—	88159	Relay Wedge	
1	61343	Battery Separator	1
2	60536	20 Amp Maxi Fuse (Deutz models) (Perkins models) (GM models)	 2 3 2
—	88164	Fuse Socket	
3	94327	30 Amp Maxi Fuse (diesel models)	 1
—	88164	Fuse Socket	
4	101340	60 Amp Maxi Fuse (Deutz models)	 1
—	88164	Fuse Socket	
5	61225	Sealed Relay, 12V DC, 70A (diesel models)	 2
—	88162	Fuse Socket (diesel models)	
—	34052	Plug-in Relay, SPDT, 12V DC (GM models)	 2
—	88167	Dual Realy Socket (GM models)	
6	34052	Plug-in Relay, SPDT, 12V DC (diesel models) (GM models)	 3 2
—	88167	Dual Relay Socket	
7	88160	Relay Bracket	3
8	49816	Screw - PHPM, 10-32 x 0.75 inch	
9	6178	Nylock Nut, 10-32	
10	88265P	Relay Mount	1

Fuse configuration may vary. Please refer to relay decal located on box cover for placement.

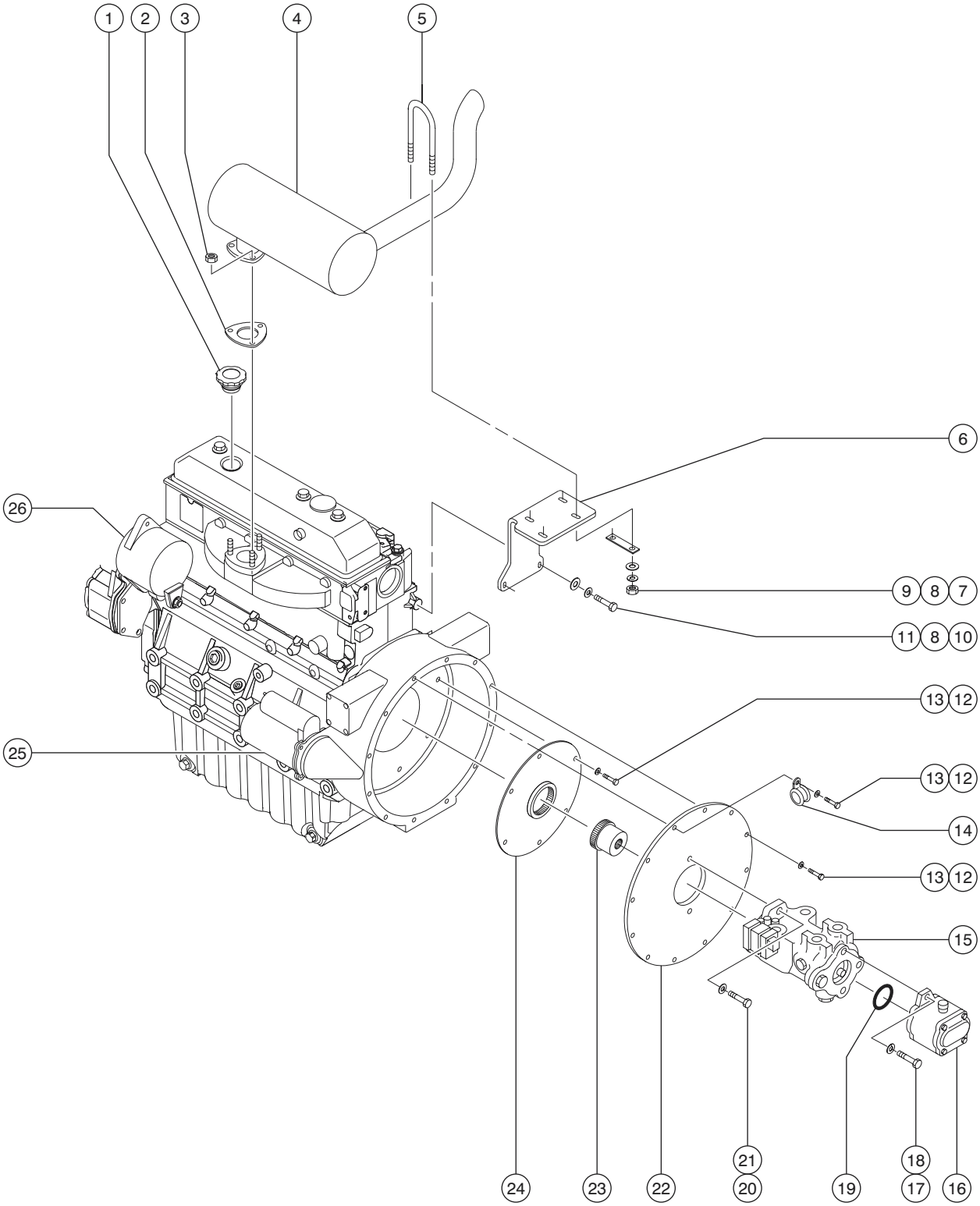
Figure	Rev	Description
307.2	A	Turntable Components - Relay Panel (after serial number 338)



Item	Part No.	Description	Qty.
—	88159	Relay Wedge	
1	61343	Battery Separator	1
2	106051	Connector	2
3	94327	30 Amp Maxi Fuse (diesel models)	1
—	88164	Fuse Socket	
4	61225	Sealed Relay, 12V DC, 70A (diesel models) (Ford models)	2 1
5	60536	20 Amp Maxi Fuse	2
—	88164	Fuse Socket	
6	101340	60 Amp Maxi Fuse (Deutz models)	1
—	88151	70 Amp Maxi Fuse (Perkins models)	2
—	88164	Fuse Socket	
7	34052	Plug-in Relay, SPDT, 12V DC (Deutz models) (Perkins models) (Ford models)	3 4 3
—	88167	Dual Relay Socket	
8	88160	Relay Bracket	3
9	49816	Screw - PHPM, 10-32 x 0.75 inch	
10	6178	Nylock Nut, 10-32	
11	88265P	Relay Mount (before serial number 777)	1
—	102353P	Fuse Panel (after serial number 776) (shown)	
12	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
13	5397	Flat Washer, 5/16 inch	
14	6091	Nylock Nut, 1/4 -20	

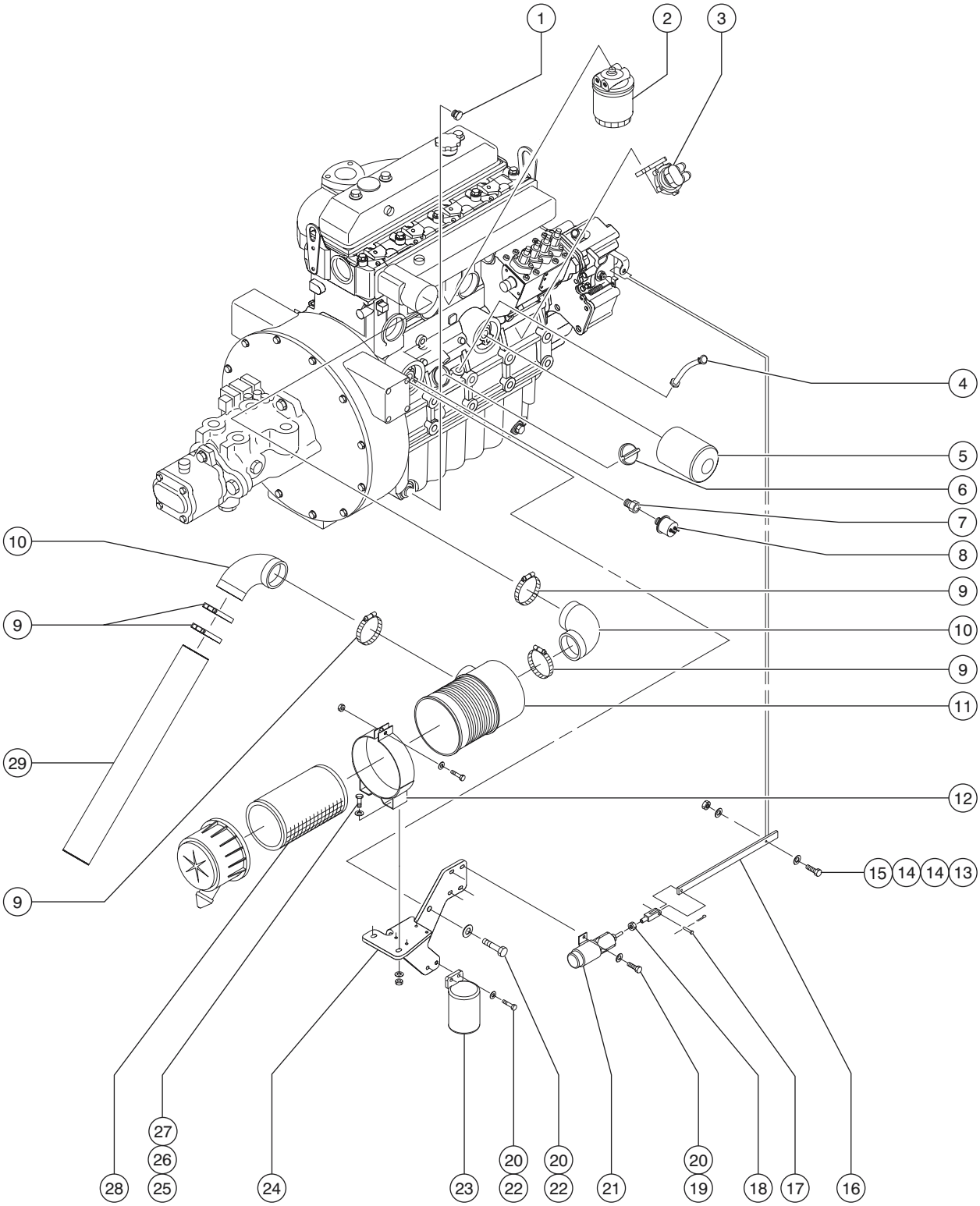
Fuse configuration may vary. Please refer to relay decal located on box cover for placement.

Figure	Rev	Description
401.1	C	Perkins 704-30 Engine - View 1 (before serial number 329)



Item	Part No.	Description	Qty.
—	88135	Engine Wire Harness	
—	88268	Engine Wire Harness, RPM Solenoid Relay	
1	65499	Oil Filler Cap	1
2	65503	Muffler Gasket	1
3	65504	Flange Nut, M10	3
4	63313	Muffler	1
5	16584	U-bolt, 5/16 -18 x 2.5 inches	2
6	63326P	Exhaust Bracket	1
7	6782	Nylock Nut, 5/16 -18	
8	44064	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
9	22700	Lock Washer, M10	
10	6886	Lock Washer, 5/16 inch	
11	5397	Flat Washer, 5/16 inch	
12	23057	Screw - HHC, M8 x 1.25 x 20 mm, GR 8.8	
13	6638	Flat Washer, 1/4 inch	
14	45454	Rubber Cushioned Clamp, 0.75 inch	1
15	Ref.	Drive Pump (refer to 709.1)	
16	Ref.	Function Pump (refer to 709.1)	
17	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
18	6097	Flat Washer, 3/8 inch	
19	29436	O-ring	1
20	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
21	13066	Flat Washer, 1/2 inch	2
22	63464P	Pump Mount Plate	1
23	37002	Pump Coupler	1
24	33024	Flex Plate	1
25	65495	Starter	1
26	65487	Alternator, 65 Amp	1

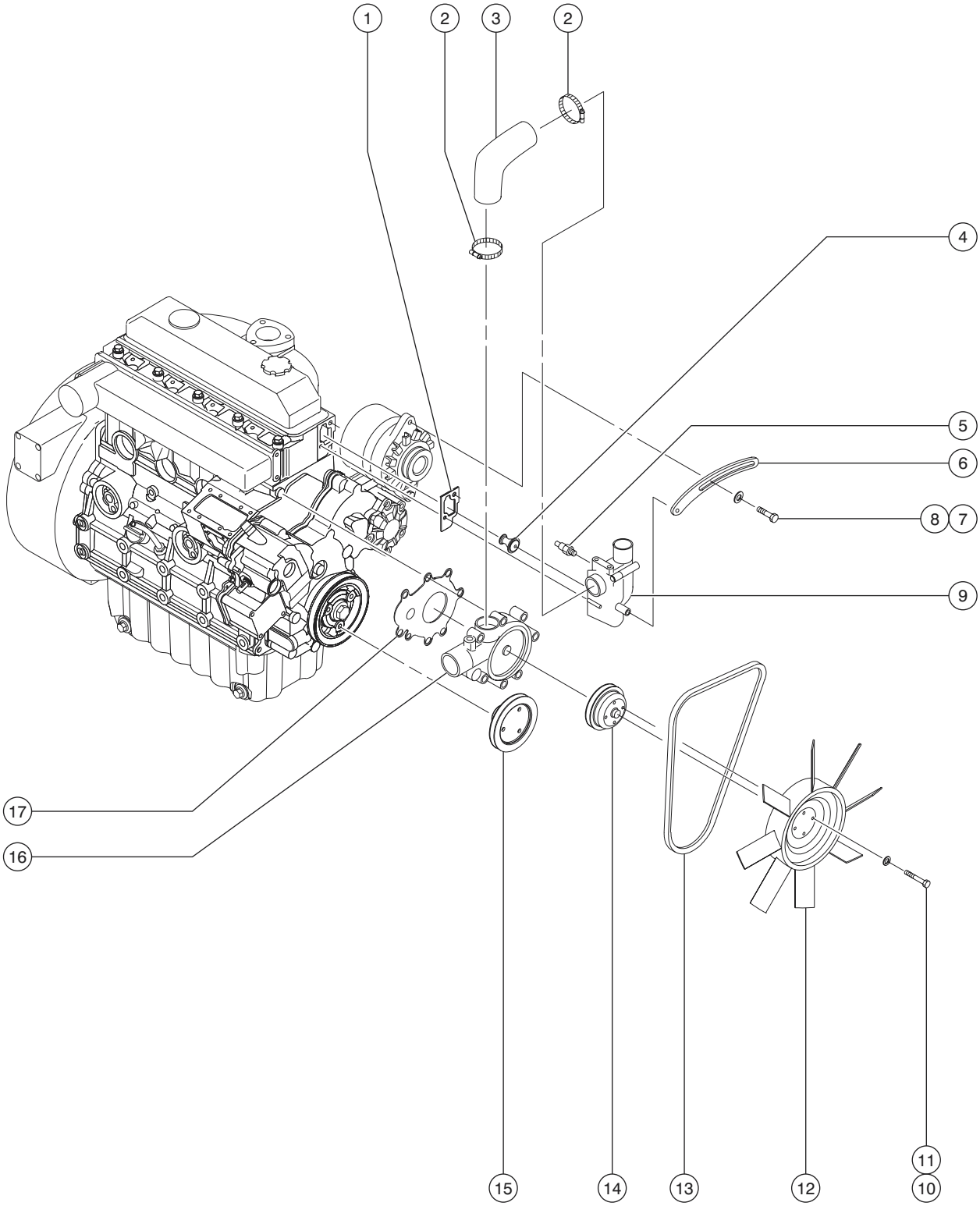
Figure	Rev	Description
402.1	B	Perkins 704-30 Engine - View 2 (before serial number 329)



402.1
Perkins 704-30 Engine - View 2 (before serial number 329) Rev B

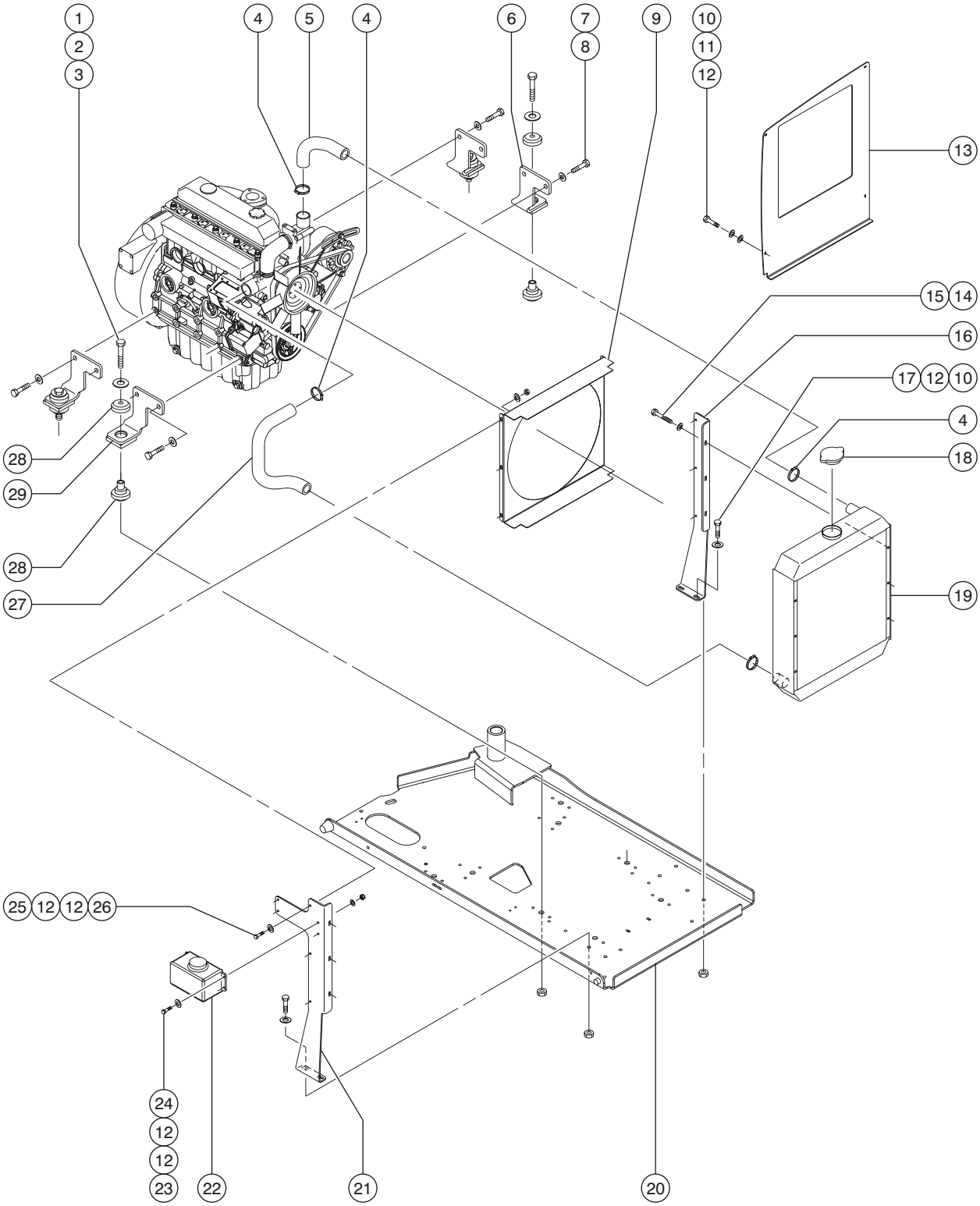
Item	Part No.	Description	Qty.
1	49517	Engine Oil Drain Plug	1
2	62421	Fuel Filter	1
3	65500	Fuel Lift Pump	1
—	65501	Fuel Lift Pump Fitting Kit	
—	53948	Fitting	
4	65497	Dipstick	1
5	62422	Oil Filter	1
6	65498	Oil Filler Cap	1
7	53951	Female Adapter, 3/4 -16	1
8	30810	Oil Pressure Sending Unit	1
9	53945	Hose Clamp, 3.25 inches	5
10	34164	Hose Elbow, 90°	2
11	63463	Air Cleaner Assembly (includes items 12 and 28)	1
12	53952	Air Filter Mount Bracket (includes mounting fasteners)	1
13	81128	Screw - SHSH, M5 x 0.8 x 16 mm	
14	56660	Riveting Washer, 1/4 inch	
15	27082	Nylock Nut, M5	
16	88512	Throttle Linkage	1
17	21130	Clevis Yoke Assembly, 1/4 -28	1
18	21496	Hex Nut, 1/4 -28	
19	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
20	6638	Flat Washer, 1/4 inch	
21	77402	Throttle Solenoid	1
—	88486	Solenoid Spring	
22	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
23	81199	Fuel Filter/Water Separator	1
—	65853	Filter Element	
24	63399P	Air Filter Bracket	1
25	13002	Screw - HHC, 5/16 -18 x 1 inch, GR 5	
26	5397	Flat Washer, 5/16 inch	
27	6782	Nylock Nut, 5/16 -18	
28	62420	Air Filter Element	1
29	34162-2300	Air Intake Hose, 2.5 I.D., 23 inches	1

Figure	Rev	Description
403.1	C	Perkins 704-30 Engine - View 3 (before serial number 329)



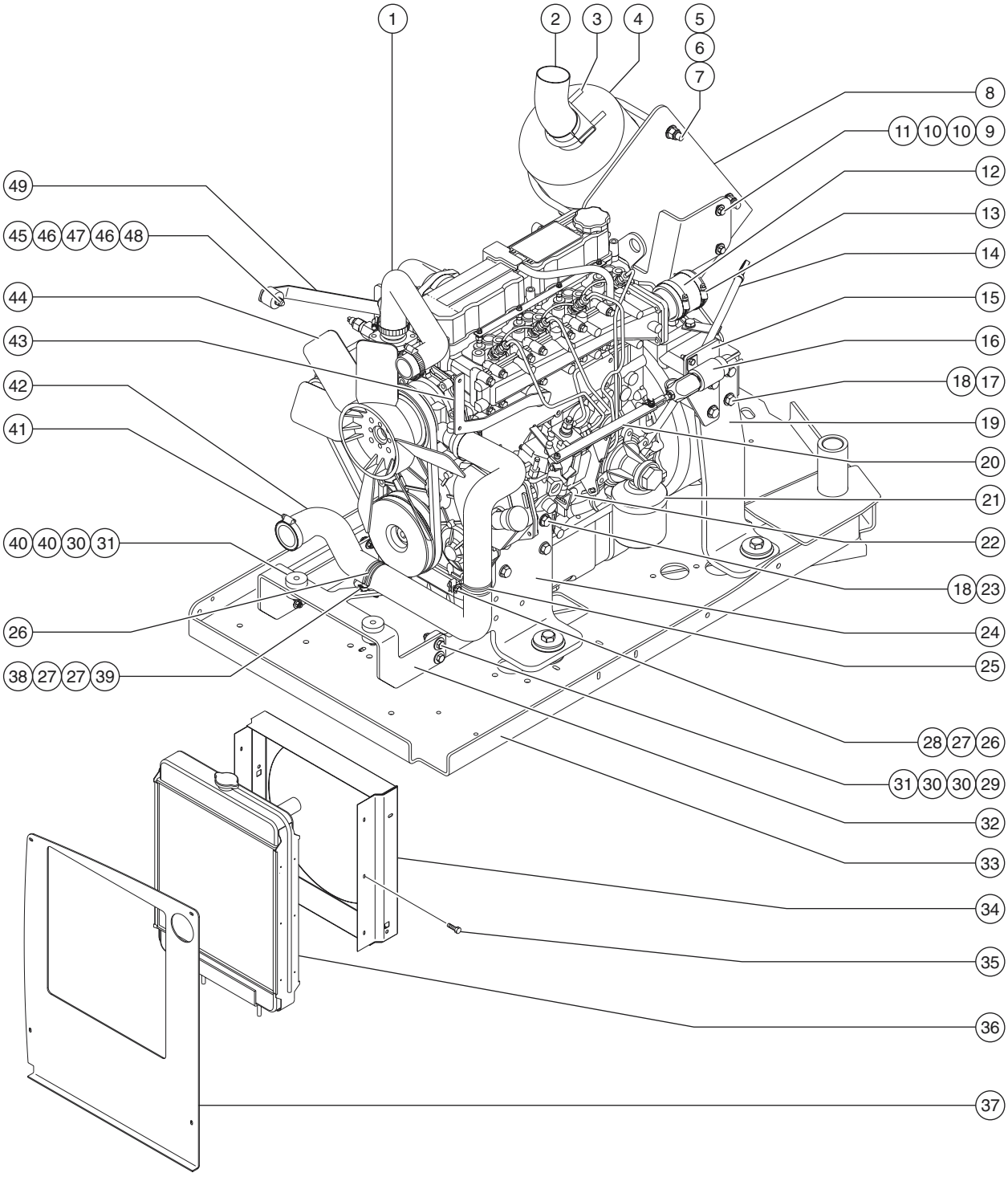
Item	Part No.	Description	Qty.
1	65505	Thermostat Housing Gasket	1
2	65506	Hose Clamp	2
3	65507	Water Pump Hose	1
4	65493	Thermostat	1
5	34058	Coolant Temperature Sending Unit	1
6	65488	Alternator Bracket	1
7	49381	Screw - HHC, M12 x 1.75 x 30 mm, GR 8.8	
8	65355	Lock Washer, M12	
9	65494	Thermostat Housing	1
10	67349	Screw - HHC M8 -1.25 x 50 mm, GR 8.8	
11	49408	Lock Washer, M8	
12	65490	Fan	1
13	62423	V-belt	1
14	102683	Fan Pulley	1
15	65496	Crankshaft Pulley	1
16	65491	Water Pump	1
17	65492	Water Pump Gasket	1

Figure	Rev	Description
404.1	B	Perkins 704-30 Engine - View 4 (before serial number 329)



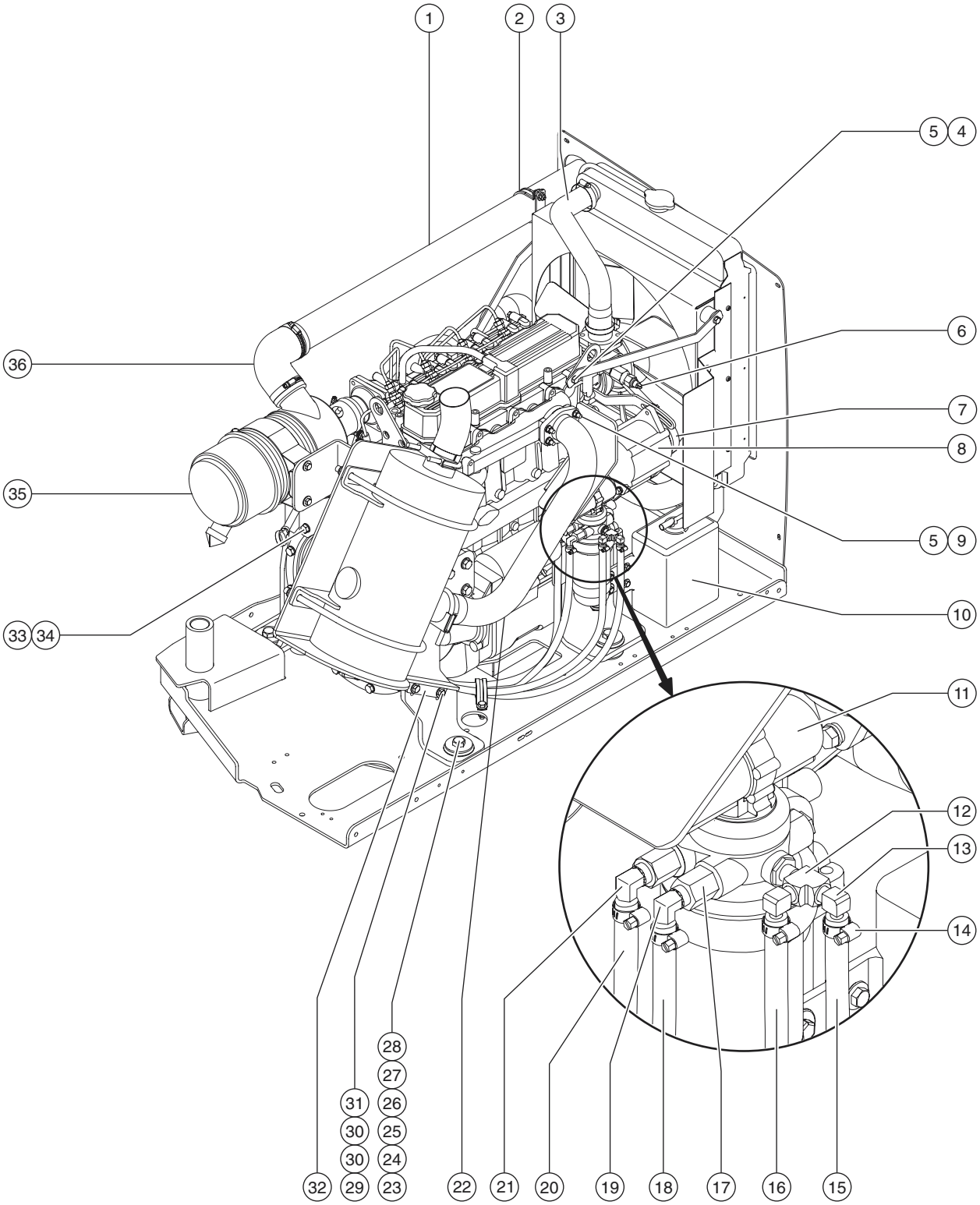
Item	Part No.	Description	Qty.
1	53909	Screw - HHC, 5/8 -11 x 4 inches, GR 8	4
2	33418	Flat Washer, 5/8 inch	
3	6024	Nylock Nut, 5/8 -11	
4	13014	Hose Clamp, 2.25 inches	4
5	63413	Upper Radiator Hose	1
6	63418	Inboard Engine Mount	2
7	49384	Screw - HHC, M14 -2 x 30 mm, GR 8.8	
8	37505	Lock Washer, M14	
9	63364P	Fan Shroud	1
10	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
11	6356	Lock Washer, 1/4 inch	
12	6638	Flat Washer, 1/4 inch	
13	8819P	Intake Baffle	1
14	13002	Screw - HHC, 5/16 -18 x 1 inch, GR 5	
15	5397	Flat Washer, 5/16 inch	
16	63362P	Left Side Radiator Mount	1
17	7713	Low Profile Nylock Nut, 3/8 -16	
18	65473	Radiator Cap	1
19	63462	Radiator (includes item 18)	1
20	Ref.	Engine Tray (refer to 420.1)	
21	101971	Right Side Radiator Mount Assembly	1
22	54071	Coolant Return Tank with Hose	1
—	72327	Return Tank Cap	
23	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
24	6889	Low Profile Nylock Nut, 1/4 -20	
25	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
26	6091	Nylock Nut, 1/4 -20	
27	63414	Lower Radiator Hose	1
28	28076	Shock Mount, Red & White (pair)	4
29	63419	Outboard Engine Mount	2

Figure	Rev	Description
405.1	B	Perkins 804C-33 Engine - View 1 (after serial number 328)



Item	Part No.	Description	Qty.
—	101891	Engine Wire Harness	
—	101637-S	Exhaust Scrubber Option	
—	101638-S	Spark Arrest Option	
1	101601	Upper Radiator Hose	1
—	35434	Hose Clamp, 2 inches	
2	101619	Tailpipe	1
3	71911	Muffler Clamp, 2.5 inches	
4	70444	Muffler	1
—	101634	Muffler (exhaust scrubber option)	
—	101633	Muffler (spark arrest option)	
5	70449	U-bolt, 1/2 -13 x 8.5 inches	2
6	13066	Hardened Flat Washer, 1/2 inch	4
7	66777	Toplock Nut, 1/2 -13	
8	101611P	Air Cleaner Bracket	1
9	13002	Screw - HHC, 5/16 -18 x 1 inch, GR 5	
10	5397	Flat Washer, 5/16 inch	
11	6782	Nylock Nut, 5/16 -18	
12	34162-300	Intake Tube	1
13	30971	Hose Clamp, 3 inches	
14	101625	Dipstick Tube Assembly	1
15	101620P	Solenoid Bracket	1
16	77402	Solenoid Throttle Actuator	1
—	21130	Clevis Yoke Assembly, 1/4 -28	
17	27584	Screw - HHC, M12 x 1.75 x 35 mm, GR 8.8	
18	49410	Flat Washer, M12	
19	101610P	Rear Inboard Engine Mount	1
20	94485	Throttle Linkage	
—	81128	Screw - SHSH, M5 x 0.8 x 16 mm	
—	27082	Nylock Nut, M5	
21	101613	Oil Filter	1
22	102348	Oil Pressure Switch/Sending Unit	1
—	101627	Adapter, 3/8 FNPT x M16	
23	49381	Screw - HHC, M12 x 1.75 x 30 mm, GR 8.8	
24	101608P	Front Inboard Engine Mount	1
25	6653	Rubber Cushioned Clamp, 1.88 x 0.25 inch	2
26	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
27	6638	Flat Washer, 1/4 inch	
28	56912	Spring Clip, 1/4 -20	
29	8516	Screw - HHC, 3/8 -16 x 1.5 inches, GR 5	
30	6097	Flat Washer, 3/8 inch	
31	4828	Nylock Nut, 3/8 -16	
32	101606P	Radiator Support Bracket	1
33	Ref.	Engine Tray (refer to 420.1)	
34	101603P	Fan Shroud	1
35	21019	Screw - PHM, 10-24 x 0.5 inch	
36	110304	Radiator	1
—	65473	Radiator Cap	
37	101622P	Intake Baffle	1
38	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
39	6091	Nylock Nut, 1/4 -20	
40	24038	Shock Mount	4
41	35434	Hose Clamp, 2 inches	1
42	101602	Lower Radiator Hose	1
43	101605P	Inboard Fan Shroud Bracket	1
44	107545	Fan	1
45	101629	Screw - HHC, M8 x 10 mm	
46	33277	Flat Washer, M8	
47	60585	Vibration Isolator	1
48	25368	Nylock Nut, M8	
49	101604P	Outboard Fan Shroud Bracket	1

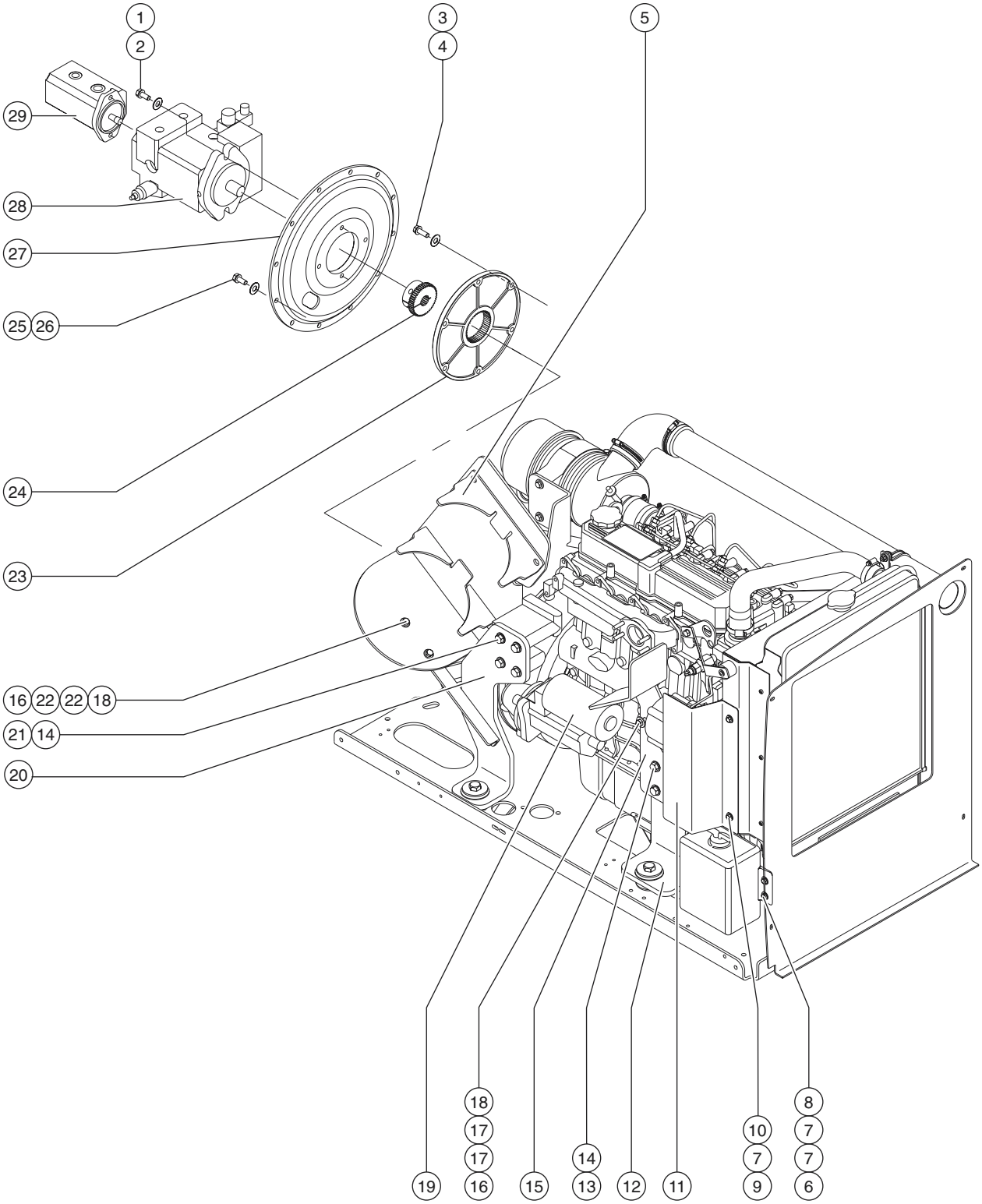
Figure	Rev	Description
406.1	B	Perkins 804C-33 Engine - View 2 (after serial number 328)



406.1
Perkins 804C-33 Engine - View 2 (after serial number 328) Rev B

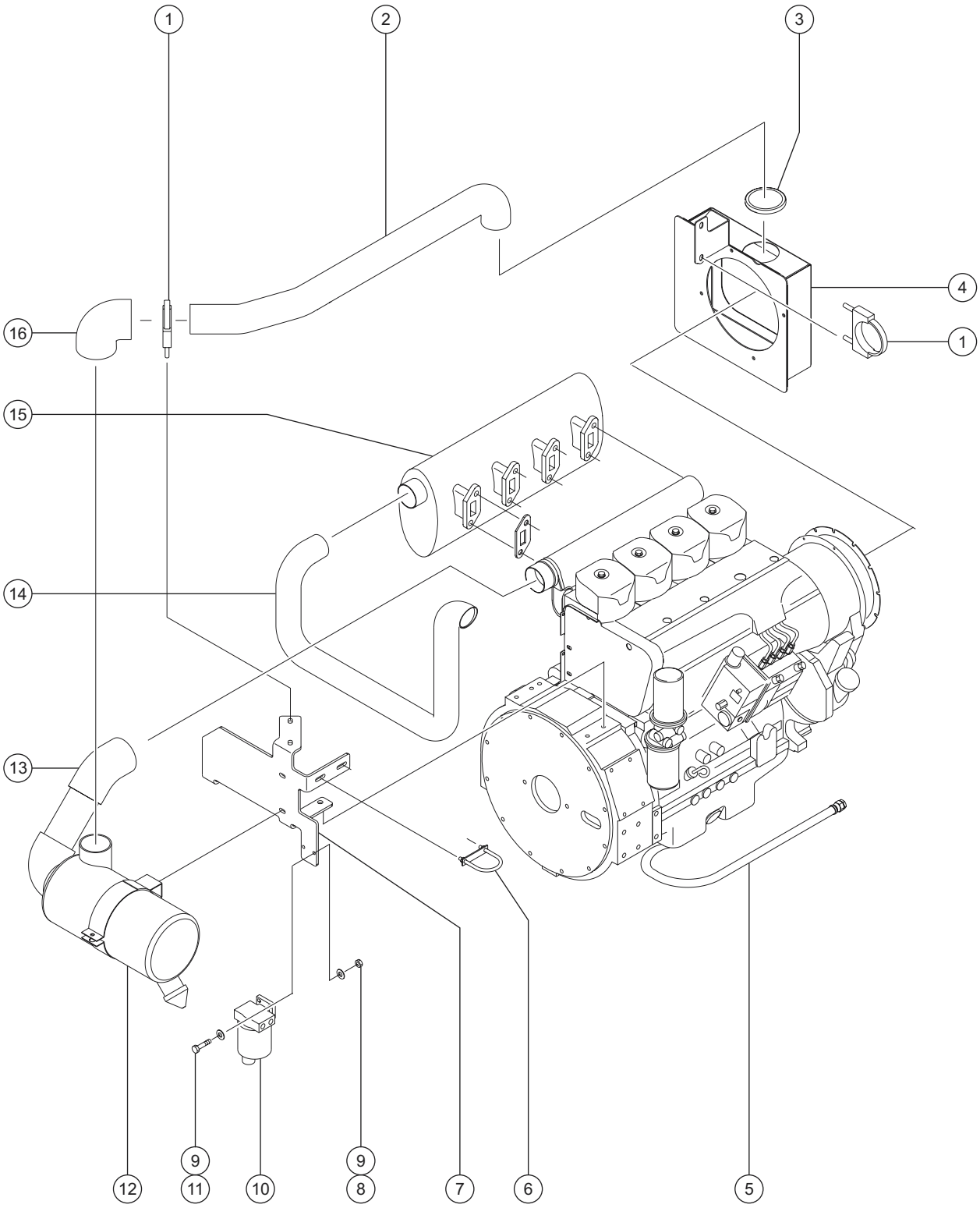
Item	Part No.	Description	Qty.
1	94324-3450	Intake Tube	1
2	101626	Rubber Cushioned Clamp, 2.5 inches	1
3	101601	Upper Radiator Hose	1
—	35434	Hose Clamp, 2 inches	
4	23057	Screw - HHC, M8 -1.25 x 20 mm, GR 8.8	
5	33277	Flat Washer, M8	
6	34058	Water Temperature Sending Unit	1
—	28607	Adapter, 140139-8-6	
7	102534	V-belt	1
8	22571	Hex Nut, M8	
9	58250	Alternator, 12V DC, 90 Amp	1
—	106023	Plug	
—	106024	Pin	
—	56689	Seal	
10	70367	Coolant Return Tank	1
11	101644	Fuel Lift Pump/Filter Assembly	1
—	101614	Fuel/Water Separator Element	
12	41468	Tee Fitting, 1/8 inch NPT	1
13	38922	Fitting, 90° Elbow 1/8 inch MPT x 5/16 inch barb	2
14	21465	Hose Clamp, 0.5 inch	8
15	27089	Fuel Hose	128 inches
—	20975	Wire Loom, 3/4 inch	
16	27089	Fuel Hose	53 inches
—	20975	Wire Loom, 3/4 inch	
17	101628	Adapter, 1/4 inch FNPT x 1/2 -20	2
18	42941	Fuel Hose	97 inches
—	20975	Wire Loom, 3/4 inch	
19	31817	Elbow, 90° 1/4 inch MPT x 3/8 inch barb	1
20	27089	Fuel Hose	63 inches
—	20975	Wire Loom, 3/4 inch	
21	54205	Elbow, 90° 1/4 inch MPT x 5/16 inch barb	1
22	101618	Exhaust Pipe	1
23	13003	Screw - HHC, 5/8 -11 x 3.5 inches, GR 8	4
24	33418	Flat Washer, 5/8 inch	
25	102045	Vibration Isolator	4
26	18596	Shim Washer, 1.56 x 2.5 x 0.061 inch	
27	6035	Flat Washer, 5/8 inch	
28	6024	Nylock Nut, 5/8 -11	
29	8516	Screw - HHC, 3/8 -16 x 1.5 inches, GR 5	
30	5397	Flat Washer, 5/16 inch	
31	4828	Nylock Nut, 3/8 -16	
32	101641P	Muffler Support Bracket	1
33	44064	Screw - HHC, M10 -1.5 x 30 mm, GR 8.8	
34	22699	Flat Washer, M10	
35	63463	Air Filter Assembly	1
—	62420	Air Filter Element	
—	53952	Mounting Bracket	
36	34164	Rubber Elbow, 90°	1
—	30971	Hose Clamp, 3 inches	

Figure	Rev	Description
407.1	B	Perkins 804C-33 Engine - View 3 (after serial number 328)



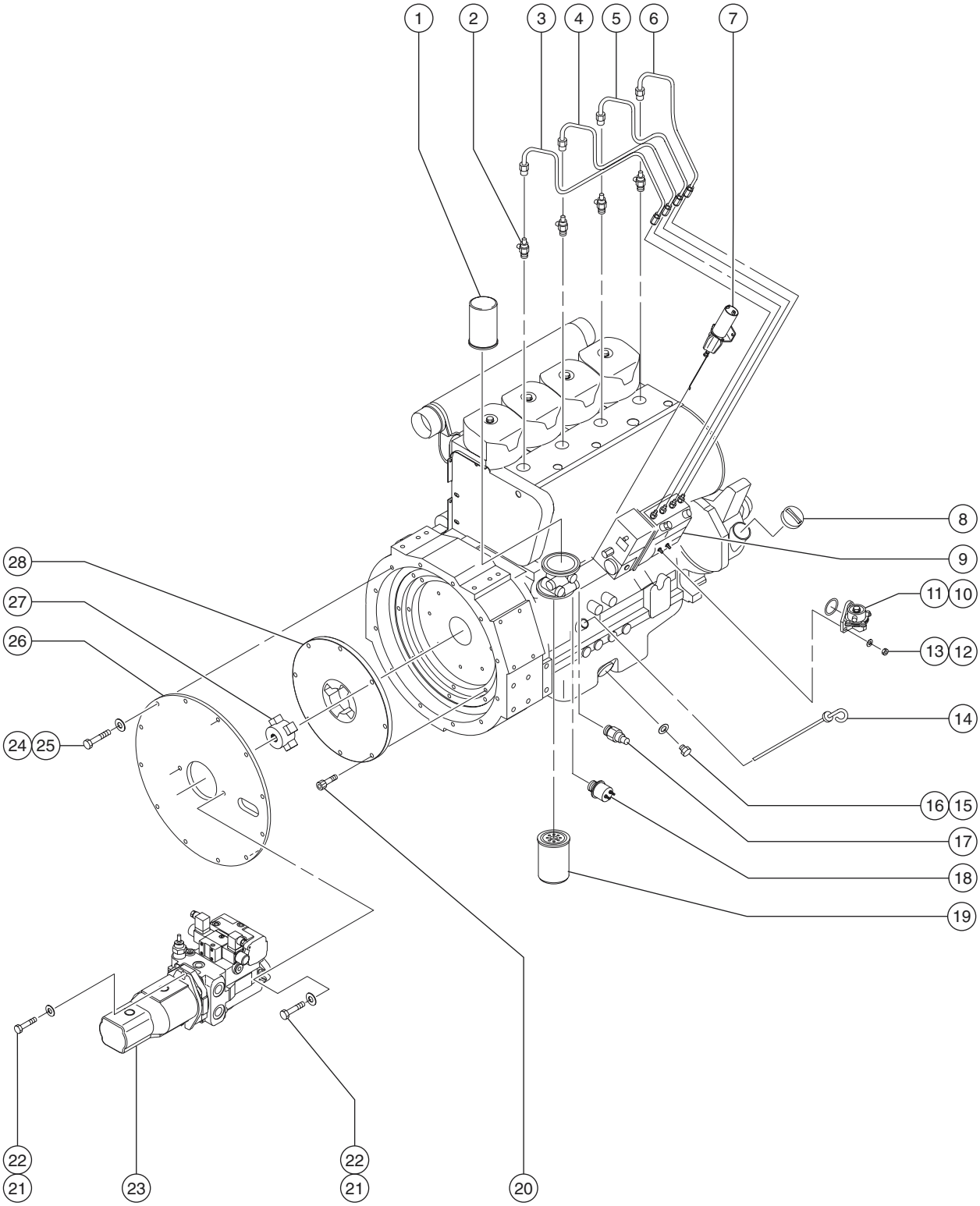
Item	Part No.	Description	Qty.
1	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
2	13066	Flat Washer, 1/2 inch	
3	44064	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
4	22699	Flat Washer, M10	
5	70483	Muffler Mount	2
6	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
7	6638	Flat Washer, 1/4 inch	
8	6091	Nylock Nut, 1/4 -20	
9	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
10	56912	Spring Clip Nut, 1/4 -20	
11	102972	Belt Guard Assembly	1
12	101607P	Outboard Engine Mount	1
13	27584	Screw - HHC, M12 -1.75 x 35 mm, GR 8.8	
14	49410	Flat Washer, M12	
15	101615P	Fuel Pump Bracket	1
16	8516	Screw - HHC, 3/8 -16 x 1.5 inches, GR 5	
17	6097	Flat Washer, 3/8 inch	
18	4828	Nylock Nut, 3/8 -16	
19	107546	Starter Motor	1
20	101609P	Outboard Rear Engine Mount	1
21	27584	Screw - HHC, M12 x 1.75 x 35 mm, GR 8.8	
22	5397	Flat Washer, 5/16 inch	
23	33024	Flex Plate	1
24	37003	Pump Coupler	1
25	27034	Screw - HHC, M10 x 1.5 x 25 mm, GR 8.8	
26	22699	Flat Washer, M10	
27	61781	Pump Mount Plate	1
28	Ref.	Drive Pump (refer to 709.1)	
29	Ref.	Function Pump (refer to 709.1)	

Figure	Rev	Description
408.1	B	Deutz F4L-913 Engine - View 1 (before serial number 339)



Item	Part No.	Description	Qty.
—	88134	Engine Wire Harness	
—	88173P	Intake Baffle	
1	61273	Heavy Duty Clamp	2
2	81469	Inlet Tube, Long	1
3	44669	Rubber Grommet, 3 x 0.13 x 3.25 inches	1
4	102973	Air Intake Box Assembly	1
5	81782	Oil Drain Hose	1
—	81781	Adapter	
—	49213	Fitting	
—	63426	Plug	
6	16584	U-bolt Assembly (with fasteners)	1
7	81471P	Exhaust/Air Cleaner Bracket	1
8	6091	Nylock Nut, 1/4 -20	
9	6638	Flat Washer, 1/4 inch	
10	81199	Fuel Filter/Water Separator, 30 Micron	1
11	8915	Screw - HHC, 1/4 -20 x 1.25 inches, GR 5	
12	81467	Air Cleaner	1
—	62425	Filter Element	
—	81468	Air Cleaner Mounting Band	
13	61270	Inlet Elbow Hose, 45°	1
—	81906-700	Inlet Tube, Short	
—	60561	Elbow Hose	
14	81470	Tailpipe	1
15	75359	Muffler	1
—	75000	Catalytic Muffler (option)	
—	75360	Exhaust Gasket	
16	60561	Elbow Hose	1

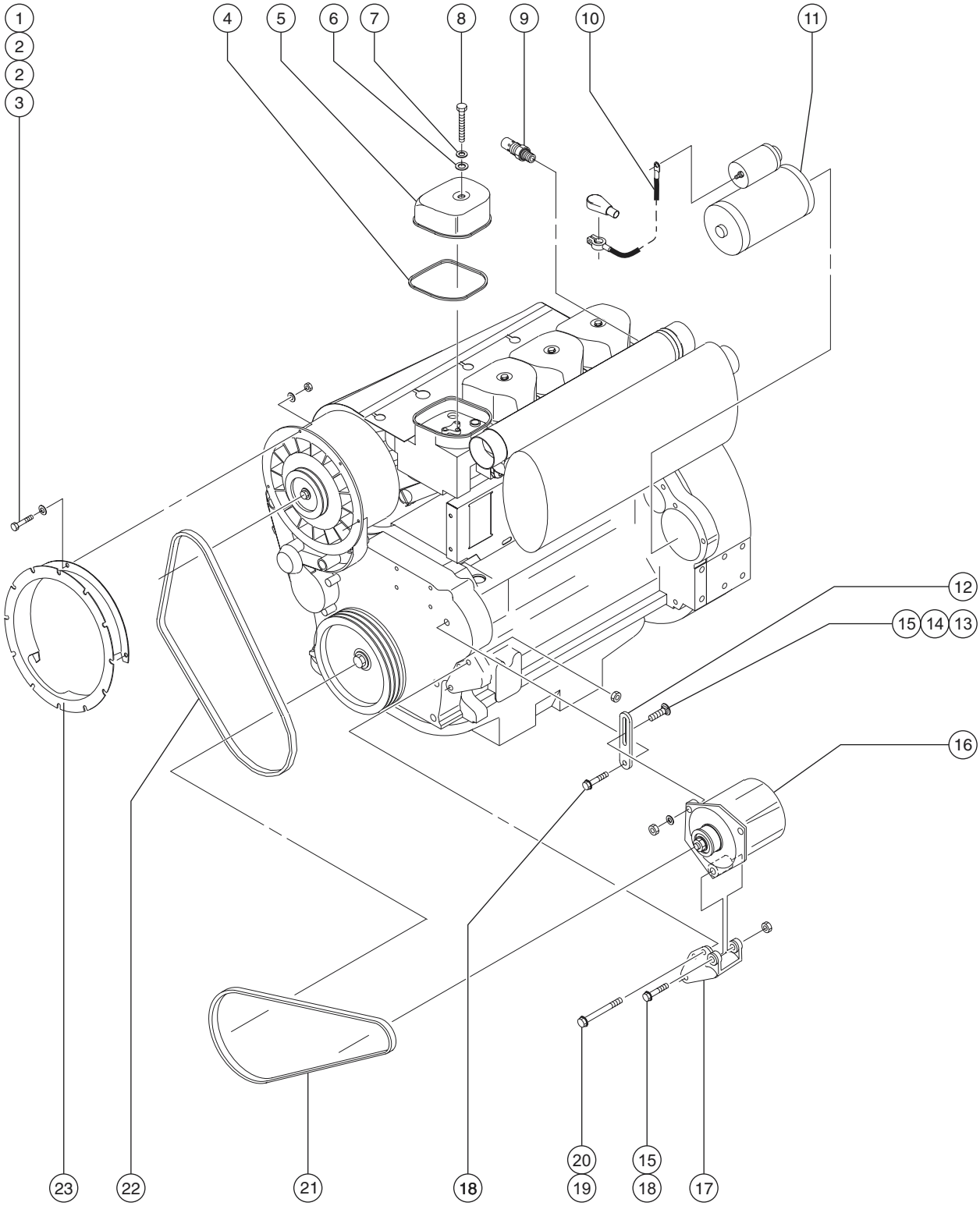
Figure	Rev	Description
409.1	C	Deutz F4L-913 Engine - View 2 (before serial number 339)



409.1
Deutz F4L-913 Engine - View 2 (before serial number 339) Rev C

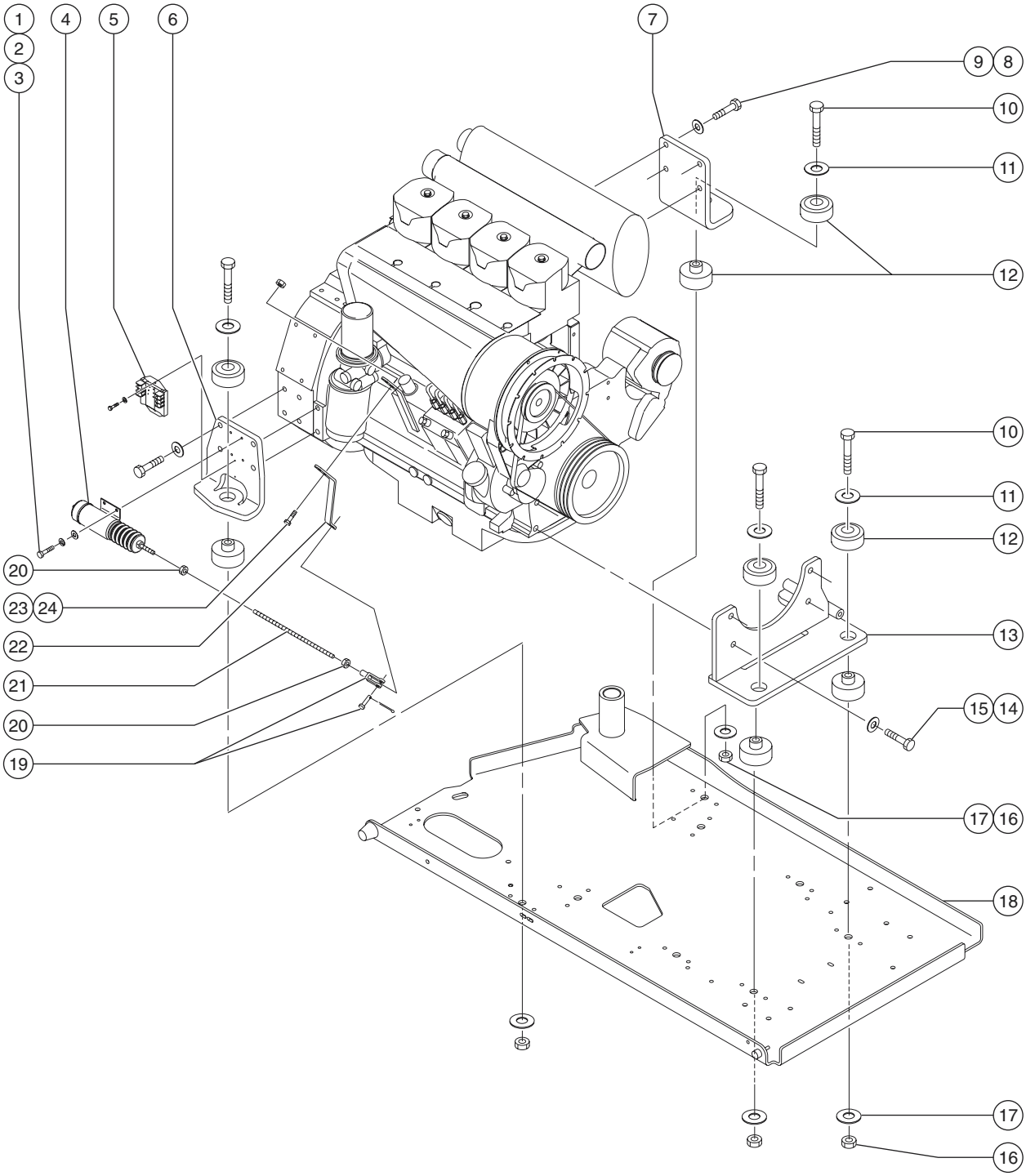
Item	Part No.	Description	Qty.
1	75484	Fuel Filter	1
2	75361	Fuel Injector	4
—	75378	Sealing Ring (sold separately)	
3	75362	Cylinder Injector Fuel Line - Number One	1
4	75363	Cylinder Injector Fuel Line - Number Two	1
5	75364	Cylinder Injector Fuel Line - Number Three	1
6	75365	Cylinder Injector Fuel Line - Number Four	1
7	75366	Shutdown Solenoid Assembly	1
8	75369	Oil Filler Cap (includes sealing ring)	1
—	75377	Sealing Ring	
9	75370	Fuel Injection Pump (includes items 10-13)	1
—	75371	O-ring (sold separately)	
10	75367	Fuel Lift Pump	1
11	72243	Fuel Lift Pump O-ring	1
12	75379	Hex Nut, M6	
13	75380	Lock Washer, M6	
14	75372	Dipstick with O-ring	1
—	75373	O-ring	
15	75374	Drain Plug	3
16	75375	Drain Plug Sealing Washer	3
17	72355	Oil Temperature Sender	1
18	75473	Oil Pressure Sender	1
19	62430	Engine Oil Filter	1
20	61110	Screw - SHC, M10 -1.5 x 30 mm, GR 8.8	8
21	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
22	13066	Flat Washer, 1/2 inch	
23	Ref.	Drive Pump Assembly (refer to 709.1)	
24	44064	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
25	22699	Flat Washer, M10	
26	63464P	Pump Mount Plate	1
27	81473	Pump Coupler	1
28	61078	Flex Plate	1

Figure	Rev	Description
410.1	B	Deutz F4L-913 Engine - View 3 (before serial number 339)



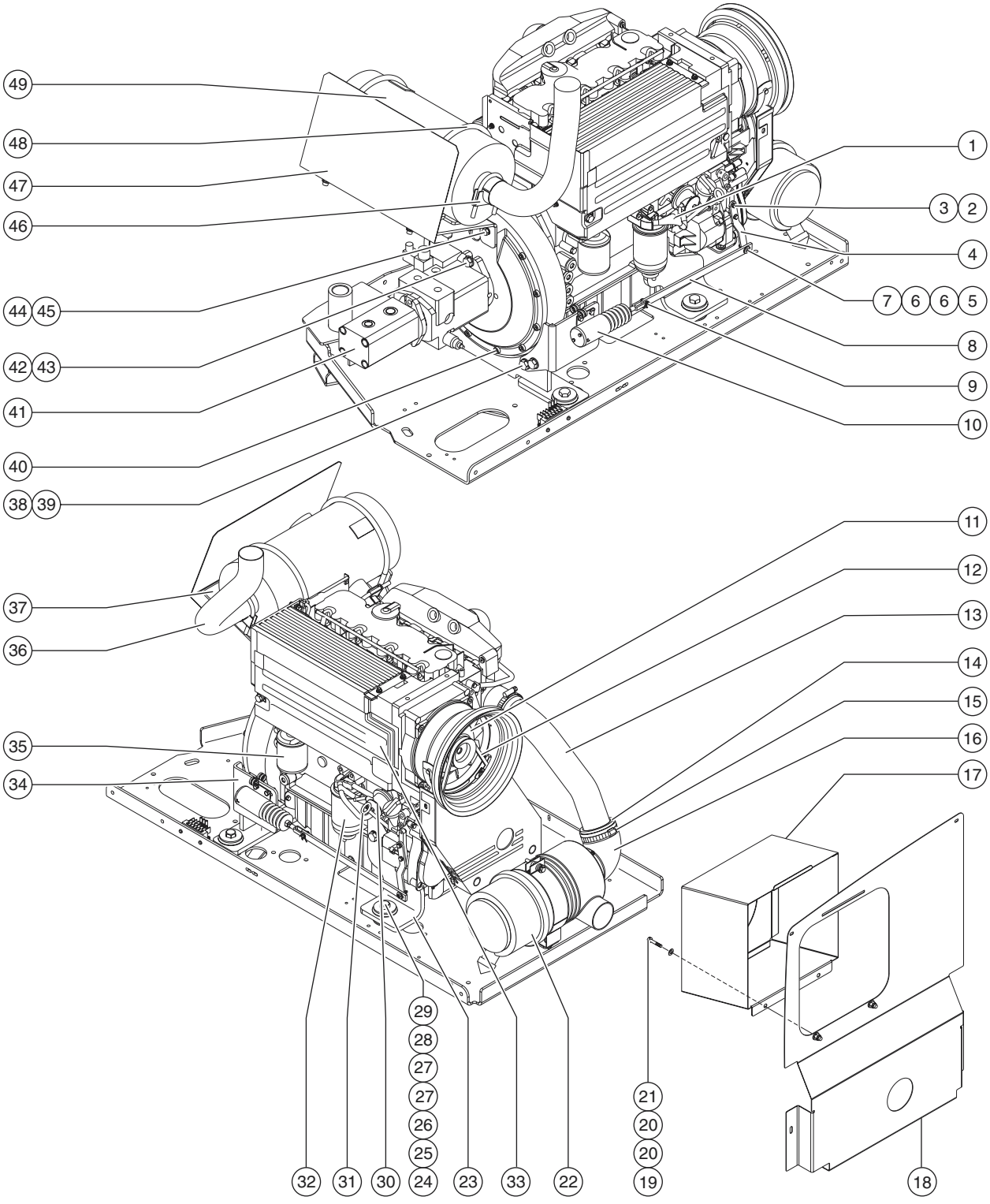
Item	Part No.	Description	Qty.
1	75381	Screw - HHC, M6 x 1 x 20 mm, GR 8.8	
2	75382	Flat Washer, M6	
3	75383	Hex Nut, M6	
4	75384	Cylinder Head Cover Gasket	4
5	75385	Cylinder Head Cover	4
6	75388	Sealing Ring	4
7	75387	Cylinder Head Cover Washer	4
8	75386	Screw - HHC, M8 x 1.25 x 30 mm, GR 8.8	
9	75389	Glow Plug	1
—	75390	Glow Plug Solenoid (sold separately)	
10	Ref.	Starter Battery Cable Assembly, (refer to 420.1)	
11	75391	Starter, 12V DC	1
—	75392	Starter Solenoid	
12	75394	Alternator Mount Bracket	1
13	75416	Carriage Bolt, M8 x 1.25 x 25 mm, GR 8.8	
14	75417	Flat Washer, M8	
15	75418	Hex Nut, M8	
16	75393	Alternator, 55A, 14V DC	1
17	75419	Alternator Support	1
18	75420	Screw - HHC, M8 x 1.25 x 120 mm, GR 8.8	
19	75421	Screw - HHC, M10 x 1.5 x 140 mm, GR 8.8	
20	75422	Hex Nut, M10	
21	62432	Alternator V-belt	1
22	62431	Engine Fan/Blower V-belt	1
23	75423	Belt Guard	1

Figure	Rev	Description
411.1	C	Deutz F4L-913 Engine - View 4 (before serial number 339)



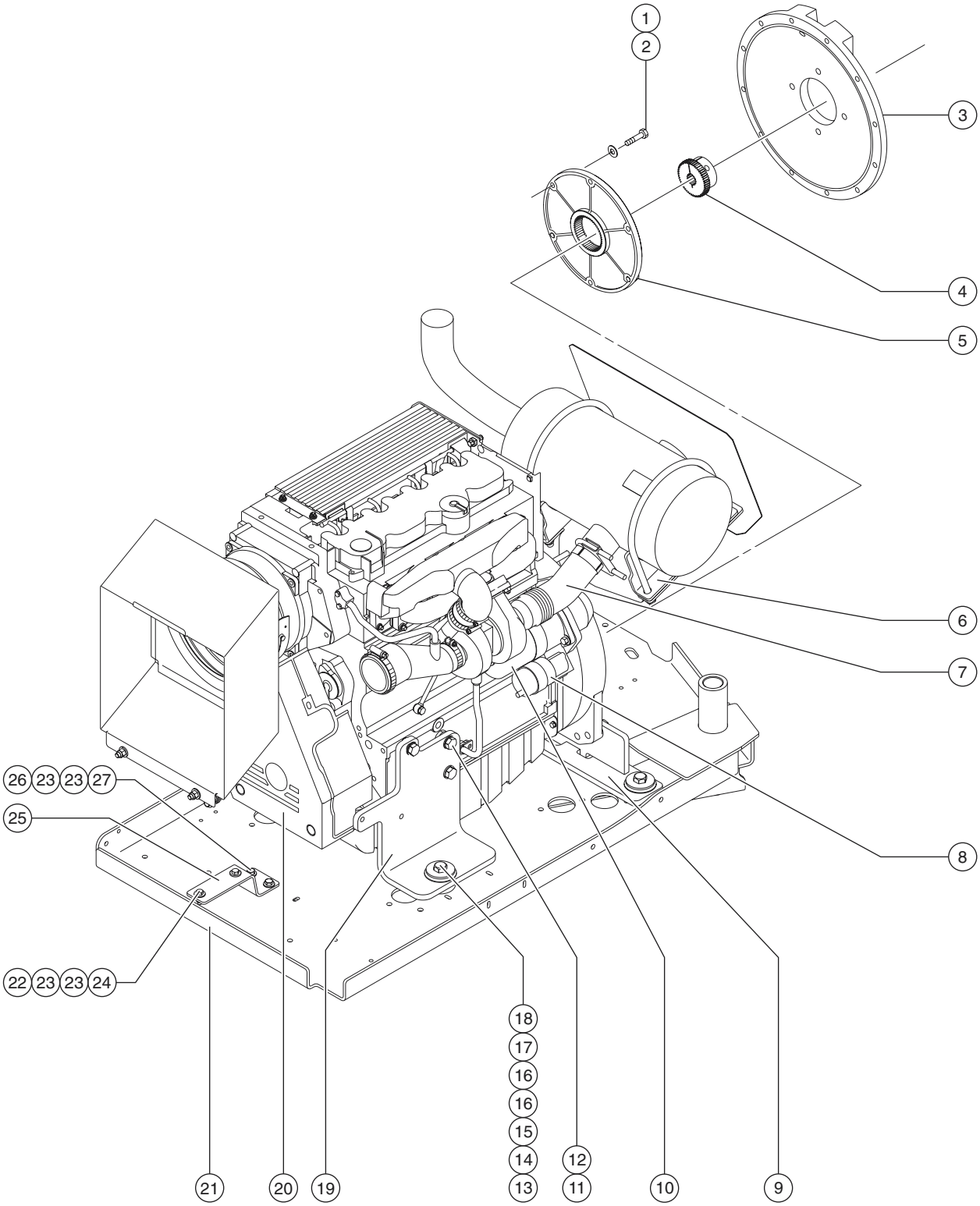
Item	Part No.	Description	Qty.
1	7339	Screw - HHC, 1/4 -20 x 0.5 inch, GR 5	
2	6356	Lock Washer, 1/4 inch	
3	6638	Flat Washer, 1/4 inch	
4	89998	Throttle Solenoid	1
—	52537	Solenoid Boot	
5	89997	Relay Module	1
6	81463P	Rear Outboard Engine Mount	1
7	81462P	Rear Inboard Engine Mount	1
8	60868	Screw - HHC, M12 x 2 x 45 mm, GR 8.8	
9	49410	Flat Washer, M12	
10	59746	Screw - HHC, 5/8 -11 x 4 inches, GR 5	
11	33418	Flat Washer, 5/8 inch	
12	60573	Vibration Isolator, Green/White (pair)	4
13	81464P	Front Engine Mount	1
14	75398	Screw - HHC, M14 x 2 x 10 cm, GR 8.8	
15	75399	Washer, M14	
16	6024	Nylock Nut, 5/8 -11	
17	6035	Flat Washer, 5/8 inch	
18	Ref.	Engine Tray (refer to 420.1)	
19	21130	Clevis Yoke, 1/4 -28 (includes clevis pin and cotter pin)	1
20	21496	Hex Nut, 1/4 -28	
21	30785-1000	Threaded Rod, 1/4 -28 x 10 inches	1
22	75082P	Throttle Arm	1
23	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
24	6889	Low Profile Nylock Nut, 1/4 -20	

Figure	Rev	Description
412.1	B	Deutz BF4L-2011 Engine - View 1 (after serial number 338)



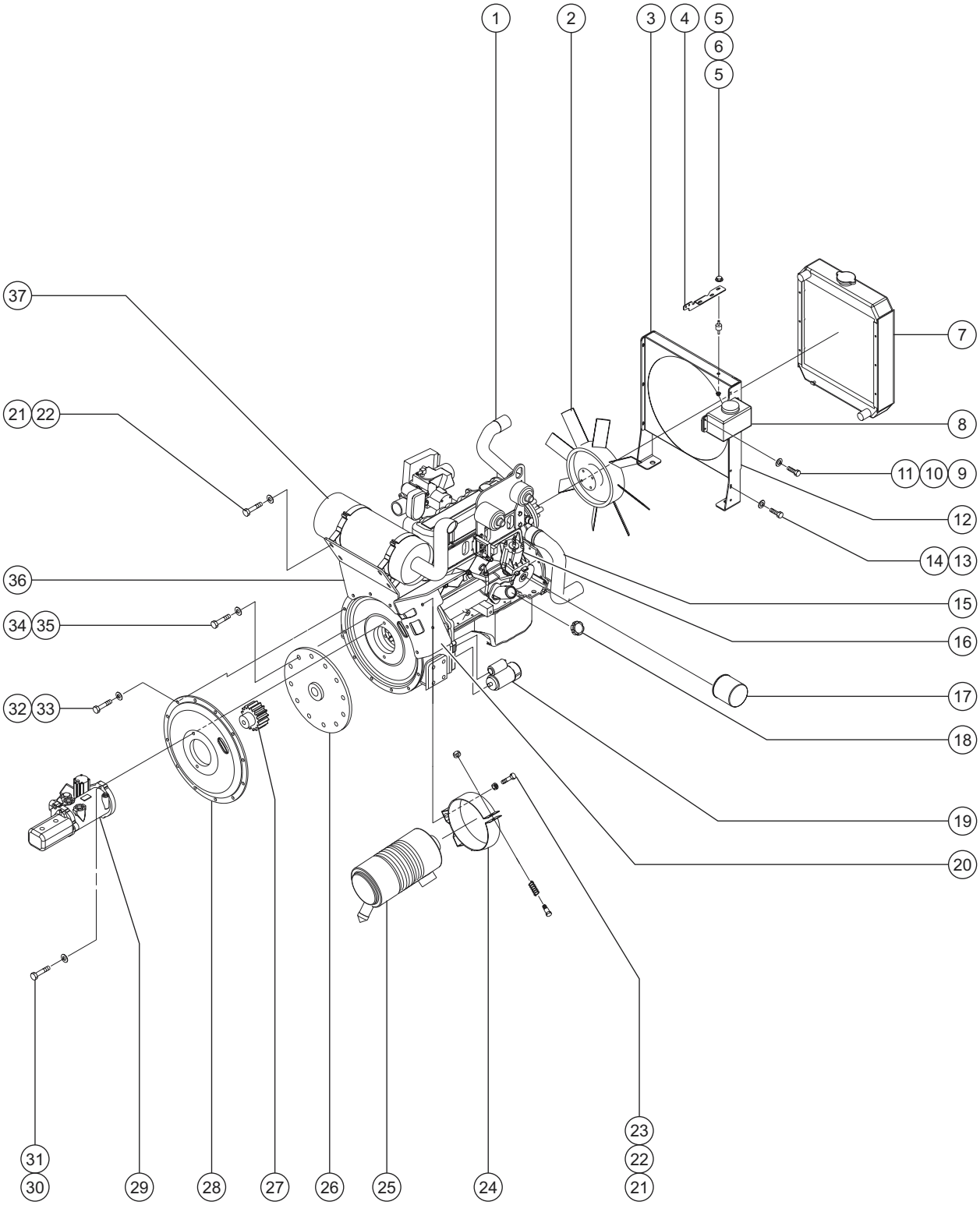
Item	Part No.	Description	Qty.
—	101848	Engine Wire Harness	
—	101637	Exhaust Scrubber Option	
—	101638	Spark Arrest Option	
1	102497	Fuel Lift Pump	1
—	102498	Fuel Lift Pump O-ring	
—	27089	Fuel Hose 5/16 inch	106 inches
—	30490	Fuel Hose 1/4 inch	68 inches
2	22578	Screw - HHC, M6 x 1 x 20 mm, GR 8.8	
3	49407	Lock Washer, M6	
4	70479P	Throttle Arm	1
5	6584	Screw - SHS, 10-24 x 0.63 inch	
6	6638	Flat Washer, 1/4 inch	
7	5365	Nylock Nut, 10-24	1
8	88512	Throttle Link	1
9	21130	Clevis Yoke, 1/4 -28 (includes clevis pin and cotter pin)	1
10	89998	Solenoid Kit	1
—	89996	Solenoid	
—	89997	Relay Module	
11	58249	Alternator, 14V DC, 80 Amp	1
12	102589	V-belt	1
13	102227	Air Intake Tube	1
14	88064	Reducer	1
15	30489	Hose Clamp, 3.5 inches	4
16	60561	Fitting, Elbow	1
17	102974	Intake Box Assembly	1
18	102228P	Intake Baffle	1
19	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
20	5397	Flat Washer, 5/16 inch	
21	4828	Nylock Nut, 3/8 -16	
22	81467	Air Cleaner	1
—	62425	Filter Element	
—	81468	Mounting Band	
23	70455P	Front Outboard Engine Mount	1
24	13003	Screw - HHC, 5/8 -11 x 3.5 inches, GR 8	6
25	33418	Flat Washer, 5/8 inch	
26	102045	Vibration Isolator	6
27	18596	Shim Washer	
28	13064	Flat Washer, 5/8 inch	4
29	6024	Nylock Nut, 5/8 -11	
30	58299	Oil Pressure Sending Unit	1
31	49922	Dipstick	1
—	102585	O-ring	
32	89783	Fuel Filter/Water Separator	1
33	102686	Oil Temperature Sending Unit	1
34	70478P	Solenoid Mount	1
35	49924	Oil Filter	1
36	70465	Tailpipe	1
37	70448P	Muffler Mount	1
38	22558	Screw - HHC, M14 x 2 x 40 mm, GR 8.8	
39	49411	Flat Washer, M14	
40	61110	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
41	Ref.	Drive Pump Assembly (refer to 709.1)	
42	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
43	13066	Flat Washer, 1/2 inch	
44	85053	Screw - HHC, M10 x 1.5 x 70 mm, GR 8.8	
45	22699	Flat Washer, M10	
46	71911	Muffler Clamp	2
47	102237P	Heat Shield	1
48	70449	U-bolt, 1/2 -13 x 8.5 inches	2
49	70444	Muffler	1
—	101633	Muffler (spark arrest option)	
—	101634	Muffler (scrubber option)	

Figure	Rev	Description
413.1	B	Deutz BF4L-2011 Engine - View 2 (after serial number 338)



Item	Part No.	Description	Qty.
1	44064	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
2	22699	Flat Washer, M10	
3	70381	Pump Mount Plate	1
4	37003	Pump Coupler	1
5	33024	Flex Plate	1
6	70483	Muffler Mount	1
7	70445	Exhaust Flex Pipe	1
8	49915	Starter Solenoid	1
9	70456	Rear Engine Mount	1
10	70376	Starter	1
11	22558	Screw - HHC, M14 x 2 x 40 mm, GR 8.8	
12	49411	Flat Washer, M14	
13	13003	Screw - HHC, 5/8 -11 x 3.5 inches, GR 8	4
14	33418	Flat Washer, 5/8 inch	
15	102045	Isolator	4
16	18596	Shim Washer, 1.56 x 2.5 x 0.061 inch	
17	13064	Hardened Flat Washer, 5/8 inch	4
18	6024	Nylock Nut, 5/8 -11	
19	70454P	Front Inboard Engine Mount	1
20	102580	V-belt Cover	1
21	Ref.	Engine Tray (refer to 420.1)	
22	13002	Screw - HHC, 5/16 -18 x 1 inch, GR 5	
23	5397	Flat Washer, 5/16 inch	
24	6782	Nylock Nut, 5/16 -18	
25	102209P	Air Cleaner Mount	1
26	6019	Screw - HHC, 3/8 -16 x 1.25 inches, GR 5	
27	4828	Nylock Nut, 3/8 -16	

Figure	Rev	Description
414.1	C	GM 3.0L EFI Engine - View 1 (before serial number 363)

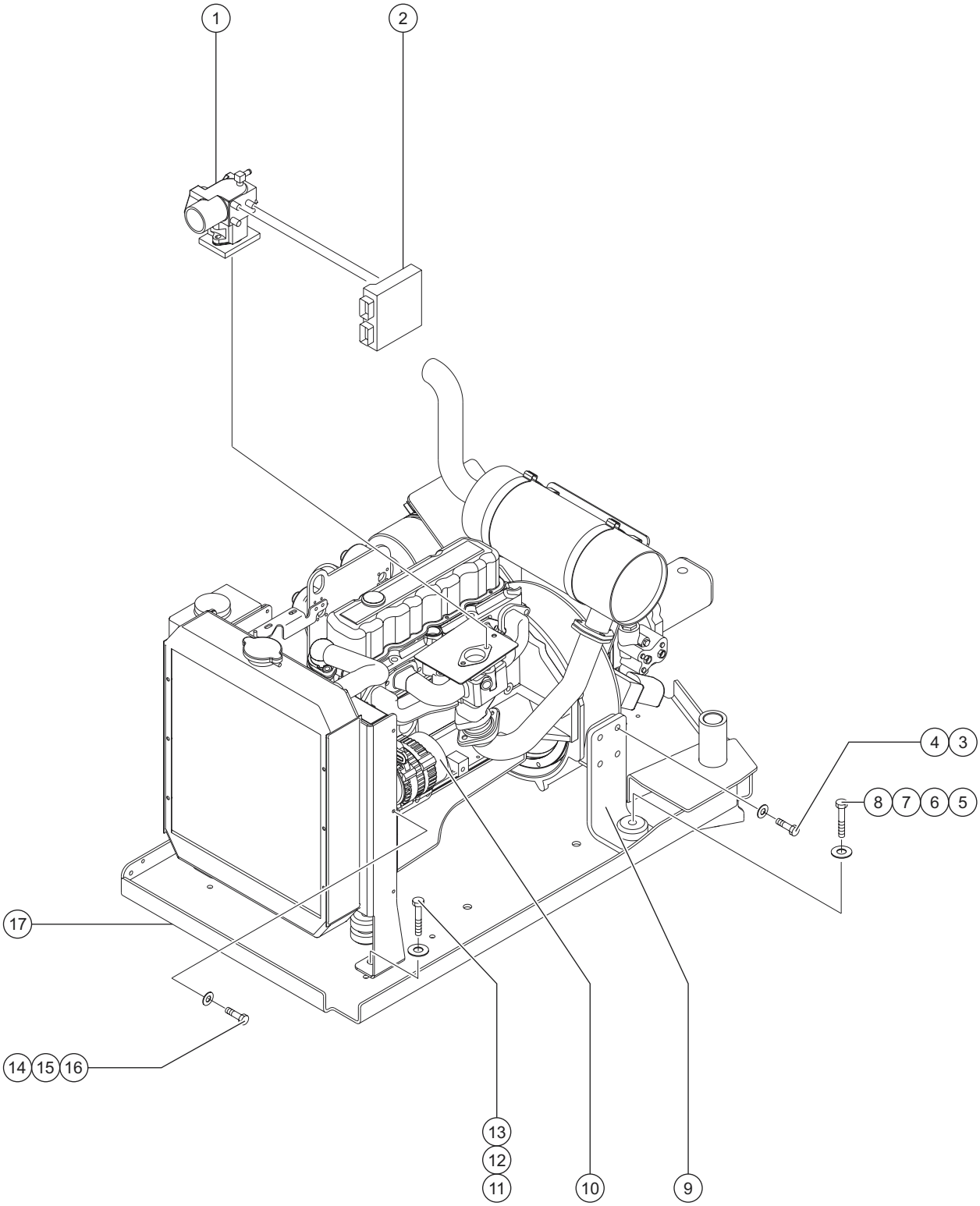


414.1
GM 3.0L EFI Engine - View 1 (before serial number 363) Rev C

Item	Part No.	Description	Qty.
—	88136	Engine Wire Harness	
—	65620	PCV Valve	
—	65622	Spark Plug	
—	77551	Ignition Coil	
—	65626	Fuel Filter	
—	65627	LPG Filter	
—	77536	Fuel Pump	
—	81837	Freeze Plug	
—	77850	Oil Pressure Switch	
—	88175P	Intake Baffle	
1	81424	Upper Radiator Hose	1
2	77821	Fan Kit	1
—	65621	V-belt	
3	81877P	Radiator Shroud	1
4	81861P	Radiator Support Bracket	1
5	18503	Flange Nut, 5/16 -18	
6	48498	Isolator	1
7	63462	Radiator	1
—	65473	Radiator Cap	
—	77542	Water Outlet Gasket	
—	77541	Thermostat	
—	77545	Thermostat Gasket	
—	94902	Water Temperature Switch	
8	54071	Coolant Return Bottle	1
—	72327	Cap	
9	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
10	6638	Flat Washer, 1/4 inch	
11	6091	Nylock Nut, 1/4 -20	
12	102975	Outboard Radiator Mount Assembly	1
—	81731P	Inboard Radiator Mount	
13	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
14	6886	Lock Washer, 5/16 inch	
15	81425	Lower Radiator Hose	1
16	77550	Distributor	1
—	65624	Distributor Cap	
—	65625	Distributor Rotor	
17	65623	Oil Filter	1
—	88100	Oil Drain Adapter	

Item	Part No.	Description	Qty.
18	77540	Oil Filler Cap	1
19	83048	Starter	1
20	81703P	Air Cleaner Bracket	1
21	13000	Screw - HHC, 5/16 -18 x 1.25 inches, GR 5	
22	5397	Flat Washer, 5/16 inch	
23	6782	Nylock Nut, 5/16 -18	
24	53952	Air Filter Housing Clamp	1
25	63463	Air Filter Housing	1
—	62420	Air Filter Element	
—	60036	Air Intake Hose	
—	35067-1900	Aluminum Tube, 19 inches	
—	35067-950	Aluminum Tube, 9.5 inches	
—	35067-200	Aluminum Tube, 2 inches	
—	34164	Elbow Hose, 90°, Rubber	
26	81426	Flex Plate	1
27	81427	Pump Coupler	1
28	61781	Pump Mount Plate	1
29	Ref.	Drive Pump Assembly (refer to 709.1)	
30	8177	Screw - HHC, 1/2 -13 x 1.5 inches, GR 5	
31	13066	Flat Washer, 1/2 inch	
32	44064	Screw - HHC, M10 x 1.5 x 30 mm, GR 8.8	
33	22700	Lock Washer, M10	
34	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
35	6021	Lock Washer, 3/8 inch	
36	81421P	Muffler Mount	1
37	81420	Muffler	1
—	33931	Mounting Band	
—	77543	Exhaust Manifold Gasket	
—	77544	Exhaust Manifold	

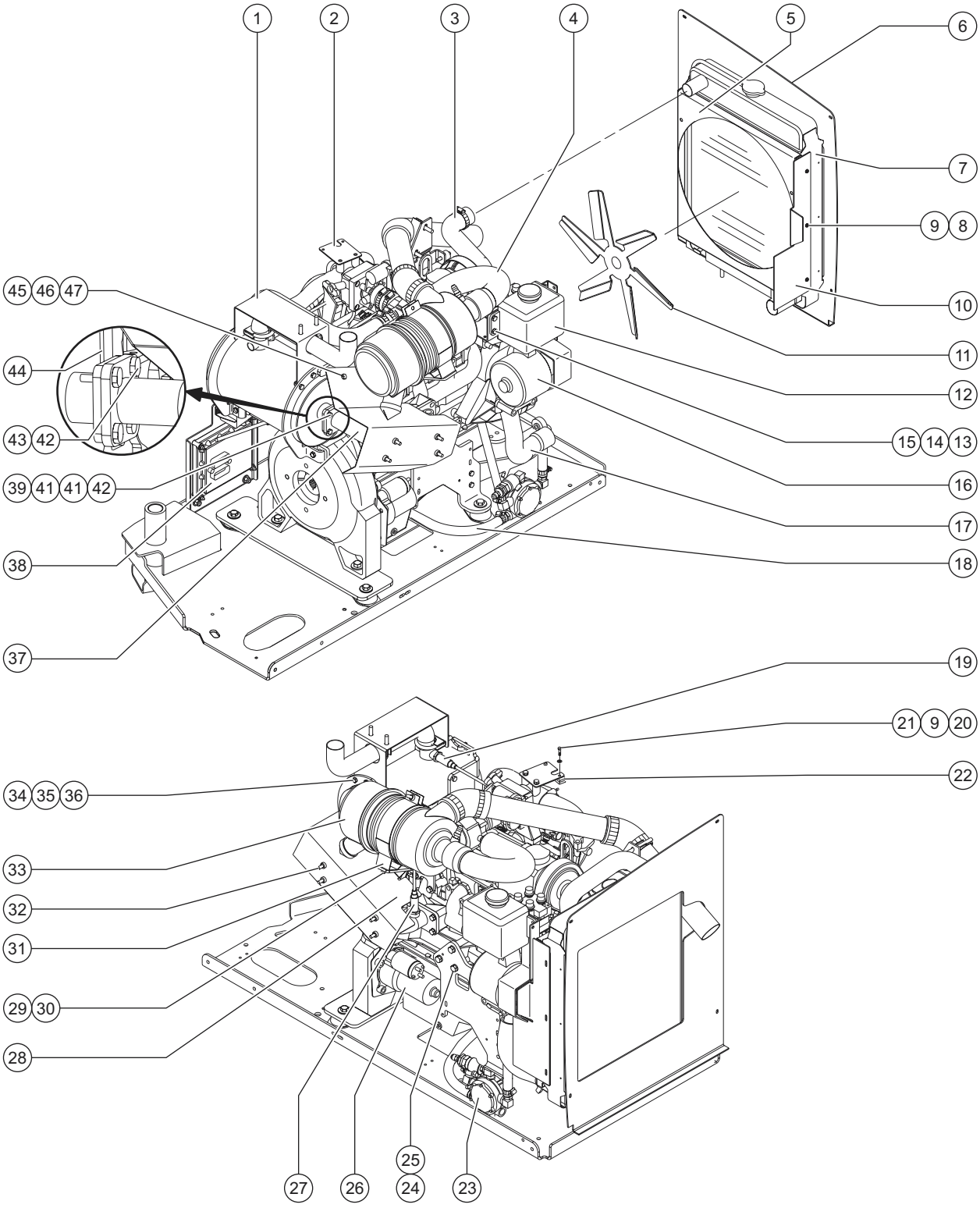
Figure	Rev	Description
415.1	C	GM 3.0L EFI Engine - View 2 (before serial number 363)



415.1
GM 3.0L EFI Engine - View 2 (before serial number 363) Rev C

Item	Part No.	Description	Qty.
1	77847	Throttle Body with Governor	1
—	77849	Propane Injector with O-rings	
—	77848	Fuel Injector with O-rings	
2	62278	Electronic Control Module	1
3	49381	Screw - HHC, M12 x 1.75 x 30 mm, GR 8.8	
4	49410	Flat Washer, M12	
5	53909	Screw - HHC, 5/8 -11 x 4 inches, GR 8	4
6	33418	Flat Washer, 5/8 inch	
7	60573	Rear Engine Mount Isolator	4
8	6024	Nylock Nut, 5/8 -11	
9	81417P	Rear Inboard Engine Mount (shown)	1
—	81418P	Rear Outboard Engine Mount	
—	88190P	Front Engine Mount	
10	77822	Alternator	1
—	65621	V-belt	
11	8516	Screw - HHC, 3/8 -16 x 1.5 inches, GR 5	
12	6097	Flat Washer, 3/8 inch	
13	4828	Nylock Nut, 3/8 -16	
14	6888	Screw - HHC, 1/4 -20 x 1 inch, GR 5	
15	6638	Flat Washer, 1/4 inch	
16	6091	Nylock Nut, 1/4 -20	
17	Ref.	Engine Tray (refer to 420.1)	

Figure	Rev	Description
416.1	B	Ford LRG-425 EFI Engine - View 1 (after serial number 362)



416.1
Ford LRG-425 EFI Engine - View 1 (after serial number 362) Rev B

Item	Part No.	Description	Qty.
—	102339	Engine Wire Harness	
—	106605	Engine Wire Harness with Relay Box	
—	77219	Fuel Pump	
1	102307	Heat Shield	1
2	53821P	Map Sensor Bracket	1
3	54862	Upper Radiator Hose	1
—	22672	Hose Clamp, 1.75 inches	
4	88847	Air Cleaner Hose	1
—	35434	Hose Clamp, 2 inches	
—	45435	Hose Clamp, 2.5 inches	
5	54598P	Radiator Shroud	1
6	70492P	Intake Baffle	1
7	110304	Radiator	1
—	4828	Nylock Nut, 3/8 -16	
—	15086	Flat Washer, 5/16 inch	
—	24038	Vibration Isolator	
8	21019	Screw - PHM, 10-24 x 0.5 inch	
9	6146	Flat Washer, #10	
10	102010P	Fan Guard	1
11	52076	Fan	1
—	70489	Fan Spacer	
—	75185	Screw - HHC, M8 x 1.25 x 70 mm, GR 8.8	
—	49408	Lock Washer M8	
12	70367	Coolant Recovery Bottle	1
—	72327	Coolant Recovery Bottle Cap	
13	6090	Screw - HHC, 1/4 -20 x 0.75 inch, GR 5	
14	6638	Flat Washer, 1/4 inch	
15	6091	Nylock Nut, 1/4 -20	
16	33960	Alternator	1
17	77170	Lower Radiator Hose	1
—	22672	Hose Clamp, 1.75 inches	
18	50948	Hose - LP, 106 inches	1
19	106486	Oxygen Sensor, Catalytic Monitor	1
20	49817	Screw - PHM, 10-32 x 1.25 inches	
21	6178	Nylock Nut, 10-32	

Item	Part No.	Description	Qty.
22	49898	Map Sensor	1
23	70525	LPG Regulator	1
—	22307	Elbow, 4-4	
—	102073	Elbow, 3/8 NPT x 1/2 FNPT	
—	102074	Elbow, 0.63 HS x 0.375 MPT	
—	88757	Lockout Valve	
—	65627	LPG Filter	
24	44064	Screw - HHC, M10-1.5 x 30 mm, GR 8.8	
25	22700	Lock Washer, M10	
26	29616	Starter	1
27	52652	Air Sensor, Temperature	1
28	102118	Heat Shield	1
29	10107	Screw - HHC, 5/16 -18 x 0.75 inch, GR 5	
30	6782	Nylock Nut, 5/16 -18	
31	77296	Air Filter Mounting Band	1
32	32064	Muffler Clamp, 1.75 inches	2
33	77236	Air Cleaner Assembly	1
—	77295	Filter Element	
—	58247	Air Cleaner Cap	
34	6175	Screw - HHC, 3/8 -16 x 1 inch, GR 5	
35	6097	Flat Washer, 3/8 inch	
36	4828	Nylock Nut, 3/8 -16	
37	89973	Exhaust Pipe	1
—	102134	Exhaust Gasket (engine)	
38	106487	Electronic Control Module	1
39	13002	Screw - HHC, 5/16 -18 x 1.25 inches, GR 5	
40	5397	Flat Washer, 5/16 inch	
41	72343	Exhaust Gasket (muffler)	1
42	18503	Locking Flange Nut, 5/16 -18	
43	61741	Screw - HHC, 5/16 -18 x 1.5 inches	
44	102779P	Heatshield Bracket	1

This list continues on the next page.

Figure	Rev	Description
416.1	B	Ford LRG-425 EFI Engine - View 1 (after serial number 362)